

Texas Commission on Environmental Quality

Remediation Division Correspondence Identification Form

SITE & PROGRAM AREA IDENTIFICATION

SITE LOCATION			REMEDIATION DIVISION PROGRAM AND FACILITY IDENTIFICATION	
Site Name: Frisco Community Development Corporation Site			Is This Site Being Managed Under A State Lead Contract? ☐ Yes ☒ No	
Address 1: 7471 Old Fifth Street			Program Area:	IHW CORRECTIVE ACTION
Address 2:			Mail Code:	MC-127
City: Frisco		State: Texas	Is This A New Site To This Program Area? ☐ Yes ☒ No	
Zip Code:	75034	County:	Collin	TCEQ Facility ID No.: SWR 30516
TCEQ Region: Region 4 - Dallas/Fort Worth			--Leave This Field Blank--	

DOCUMENT(S) IDENTIFICATION

PHASE OF REMEDIATION	DOCUMENT NAME
1. ASSESSMENT	GROUNDWATER (OR OTHER MEDIA) MONITORING REPORT
2.	
3.	
4.	
5.	

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Document No.	TCEQ Database Term	Document No.	TCEQ Database Term
1.	GW/MEDIA MONITORING RPT	4.	
2.		5.	
3.			



REPORT

2023 Second Semiannual Groundwater Monitoring Report

*Class 2 Landfill North CAMU - 3rd and 4th Quarter Events
Frisco Community Development Corporation Site
7471 Old 5th Street, Frisco, Texas, TCEQ SWR No. 30516 and Hazardous
Waste Permit No. 50206*

Submitted to:

Mr. Mack Borchardt

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January 19, 2024

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1.0 INTRODUCTION

WSP USA Inc. (WSP), is pleased to submit this report summarizing third and fourth quarter 2023 groundwater monitoring activities for the Class 2 Landfill North Corrective Action Management Unit (hereafter, the Landfill or North CAMU) located at the Frisco Community Development Corporation (Frisco CDC) Site located at 7471 Old 5th Street, Frisco, Collin County, Texas (Site). This report summarizes groundwater sampling methods, laboratory analyses and results for groundwater monitoring which was conducted in general accordance with the Revised Class 2 Landfill Groundwater Monitoring Plan (Monitoring Plan), by Pastor, Behling & Wheeler (PBW), dated July 31, 2013 [1], the Texas Commission on Environmental Quality (TCEQ) Approval with Modifications, dated April 4, 2014 [2] and subsequent correspondence with the TCEQ. The Site is currently regulated by the TCEQ Industrial and Hazardous Waste – Corrective Action (IHW-CA) Program under Solid Waste Registration (SWR) No. 30516 and Hazardous Waste Permit No. 50206.

1.1 Site Description

A location map of the Landfill is provided as Figure 1. The locations of the groundwater monitoring wells in the Landfill vicinity are shown on Figure 2. Initial notification for construction of an on-site Class 2 industrial landfill, including engineering plans and a landfill operations plan, was provided to the Texas Natural Resource Conservation Commission (TNRCC) by GNB Technologies, Inc. in August 1995. TNRCC acknowledgement of receipt and review of the notification was provided in a September 14, 1995, letter. Landfill construction commenced thereafter, and Site records indicate that the Landfill operations began in 1996. The Landfill currently consists of fifteen cells, nine of which (cells 1 through 9) have been closed and capped. The closed cells of the Landfill consist of treated slag monofills [1]. The active cells of the Landfill currently contain treated slag, but also contain Class 2 wastes generated during the demolition and remediation activities at the Site [1] and remediation activities at the Undeveloped Buffer Property (UBP) initiated in early 2017. In June 2018, a temporary cover was installed at the Landfill following completion of remediation activities at the UBP.

1.2 Uppermost Groundwater-Bearing Unit

The uppermost groundwater bearing unit (GWBU) in the vicinity of the Landfill consists of clay-rich alluvial soils of Quaternary age situated unconformably above the Late Cretaceous age Eagle Ford Formation [1]. As indicated in boring logs for the groundwater monitoring wells surrounding the Landfill, the Eagle Ford Formation occurs at depths ranging from approximately 14 to 24 feet below ground surface (bgs). Groundwater within the upper GWBU generally occurs under unconfined conditions at depths between approximately 10 and 25 feet bgs. Monitoring well locations are shown on Figure 2.

1.3 Monitoring Well System

The current monitoring well network for the Landfill consists of eleven monitoring wells. Based on the groundwater potentiometric surfaces shown on Figure 3 and Figure 4 and the projected groundwater flow paths near the Landfill, the Landfill groundwater monitoring network can be classified as follows:

- Up-gradient monitoring wells: PMW-19R and MW-45
- Cross-gradient monitoring wells: LMW-8 and LMW-9R
- Down-gradient monitoring wells: LMW-5, LMW-17, PMW-20R, LMW-21, LMW-22, MW-41, and MW-47

Well construction information for these wells is summarized in Table 1 and Table 2.

2.0 FIELD SAMPLING ACTIVITIES

2.1 Groundwater Sampling

Eleven monitoring wells included in the Landfill monitoring well network, MW-45, PMW-19R, LMW-9R, LMW-8, LMW-17, LMW-22, LMW-5, LMW-21, PMW-20R, MW-41 and MW-47 were sampled during the third and fourth quarter sampling events.

Prior to sampling, monitoring wells were inspected and the condition of the protective covers, concrete pads, riser pipes and well caps were recorded on monitoring well inspection forms, which are included in Appendix A. Next, monitoring well depths to water and total well depths were noted on field forms, and summarized on Table 1 for the third quarter event, and Table 2 for the fourth quarter event. The electronic water level probe was decontaminated with Alconox® solution and a distilled water rinse prior to use and between sampling at each monitoring well.

The monitoring wells were then purged until stabilization parameters (temperature, pH, and specific conductivity) were within 10% on three consecutive readings or three well volumes had been removed from the monitoring well. Monitoring wells were purged using a peristaltic pump and new polyethylene tubing at each sample location. A flow rate of less than 0.4 liters per minute was sustained during purging. Groundwater sample collection forms are provided in Appendix B.

After purging was completed, groundwater samples were collected using a peristaltic pump with new polyethylene tubing. Groundwater sampled for dissolved metals analysis was field filtered using disposable (one-time use) 0.45-micron filters and transferred into laboratory-supplied containers pre-preserved with nitric acid. Groundwater sampled for total metals analysis was collected into laboratory-supplied containers pre-preserved with nitric acid directly from the pump discharge tubing. One duplicate sample and one matrix spike/matrix spike duplicate (MS/MSD) sample was collected for Quality Assurance/Quality Control (QA/QC) during the sampling events.

After collection in the field, groundwater and QA/QC samples were labeled with the sample identification number, requested analysis, collection date and sampler's initials and placed on ice in a cooler and shipped by WSP under chain-of-custody protocol to the ALS Environmental Laboratory (ALS) in Houston, Texas, via FedEx overnight transport, for analysis of dissolved and total metals by USEPA SW-846 Method 6020A. Arsenic, cadmium, lead, and selenium were reported for the third and fourth quarter sampling events.

Purged groundwater and decontamination water were containerized in 55-gallon steel drums and staged as directed by Frisco CDC personnel. Approximately 12.50 gallons of purged groundwater were containerized during each of the third and fourth quarter events. The monitoring wells were locked prior to demobilization from the Site.

2.2 Well Inspection and Purging Summary

2.2.1 Third Quarter Event (September 2023)

Each of the monitoring wells sampled at the Landfill were purged and sampled on either September 11th or September 12th as described in Section 2.1. Each monitoring well was found locked upon arrival. At the time of sampling, the weather was cloudy with daytime temperatures around 80 degrees Fahrenheit. During the September sampling event, monitoring wells LMW-22, LMW-9, MW-47, PMW-20R, LMW-8, and MW-45 stabilized within five parameter readings, and all other monitoring wells stabilized within four parameter readings. All wells and well pads appeared to be in good condition at the time of sampling.

2.2.2 Fourth Quarter Event (November 2023)

Each of the monitoring wells sampled at the Landfill were purged and sampled on either November 29th or 30th as described in Section 2.1. Each monitoring well was found locked upon arrival. At the time of sampling, the weather was cloudy with daytime high temperatures in the mid-sixties degrees Fahrenheit. During the November sampling event, monitoring wells LMW-22, LMW-9R, MW-47, PMW-20R, LMW-8, MW-45 and stabilized within five parameter readings, and all other monitoring wells stabilized within four parameter readings. All wells and well pads appeared to be in good condition at the time of sampling.

3.0 RESULTS

3.1 Groundwater Flow

Monitoring well water level data for the third and fourth quarter events are summarized in Table 1 and Table 2, respectively. In the Landfill area, the potentiometric surfaces shown on Figures 3 and 4 generally slope toward the southwest at a gradient of approximately 0.03 to 0.04 feet per foot (ft/ft). The groundwater levels and gradients measured during the third and fourth quarter sampling events are generally consistent with previous groundwater monitoring events.

3.2 Analytical Results

Analytical results are summarized in Table 3 (third quarter event) and Table 4 (fourth quarter event) and laboratory reports are included in Appendix C. According to the laboratory analytical results, dissolved metals and total metals concentrations were detected below the applicable Texas Risk Reduction Program (TRRP) Residential Assessment Levels (RALs) or Protective Concentration Levels (PCLs).

3.3 QA/QC Samples

The laboratory analytical results for the duplicates are presented in Table 3 and Table 4 for the third and fourth quarter events, respectively. Analytical results are consistent with previous groundwater monitoring events.

3.4 Data Validation

WSP completed a review of the above chemical analysis data for conformance with the requirements of the TRRP guidance document, Review and Reporting of COC Concentration Data (RGG-366/TRRP-13 Revised May 2010) and for adherence to project objectives. The results of the review are discussed in the data usability summary (DUS), included as Appendix D. The DUS indicates all data are usable for determining concentrations of metals in groundwater.

4.0 CLOSING

WSP appreciates the opportunity to serve as your consultant on this project. If you have any questions concerning this report or need additional information, please contact the undersigned at 214-521-1661.

Sincerely,

USA WSP Inc.



Catherine Mear
Environmental Scientist Consultant



Timothy Jennings, PG (TX)
Assistant Vice President, Geologist

CAM/TJ



5.0 REFERENCES

- [1] Pastor, Behling & Wheeler, LLC. (July 31, 2013). Revised Class 2 Landfill Groundwater Monitoring Plan.
- [2] Texas Commission on Environmental Quality (April 4, 2014). Approval with Modifications, Class 2 Landfill Groundwater Monitoring Plan, dated July 31, 2013.

Tables

TABLE 1
THIRD QUARTER 2023
SUMMARY OF MONITORING WELL DATA
NORTH CAMU
FRISCO COMMUNITY DEVELOPMENT CORPORATION SITE
FRISCO, TEXAS

Well ID	Date Drilled	Ground Surface Elevation ¹ (feet AMSL)	Top of Casing Elevation ¹ (feet AMSL)	Depth to Water (feet BTOC)	Groundwater Elevation ² (feet AMSL)	Depth of Well (feet BTOC)	Screened Interval (feet BGS)	Well Diameter (inches)	Water Column Length (feet)	Well Casing Volume ³ (gallons)	Actual Volume Purged (gallons)
MW-45	1/14/2014	657.90	660.86	13.67	647.19	22.55	10-20	2	8.88	1.4	1.25
PMW-19R	2/26/2013	678.45	681.79	21.07	660.72	22.70	4-19	2	1.63	0.27	1.0
LMW-9R	3/1/2016	661.39	664.31	18.46	645.85	32.92	15-30	2	14.46	2.4	1.25
LMW-8	2/4/1995	645.57	648.72	15.59	633.13	24.05	7-21.5	2	8.46	1.4	1.25
LMW-22	2/27/2013	643.32	646.99	17.72	629.27	23.15	5-20	2	5.43	0.9	1.25
LMW-17	7/24/1995	646.34	648.70	19.13	629.57	25.45	10-20	4	6.32	4.1	1.0
LMW-5	2/3/1995	643.27	646.07	17.11	628.96	25.25	7-21.5	2	8.14	1.3	1.0
LMW-21	2/27/2013	645.12	648.28	19.32	628.96	28.07	10-25	2	8.75	1.4	1.0
PMW-20R	2/26/2013	645.20	648.09	19.12	628.97	28.26	10-25	2	9.14	1.5	1.25
MW-41	1/14/2014	639.17	642.17	12.47	629.70	19.15	6-16	2	6.68	1.1	1.0
MW-47	5/2/2017	635.65	638.28	7.97	630.31	17.95	7.5-15	2	9.98	1.6	1.25
MW-42	1/14/2014	638.71	642.24	9.06	633.18	NS	5-15	2	NS	NS	NS
P-1	5/8/1990	645.95	647.24	12.67	634.57	NS	10-20	2	NS	NS	NS

Notes

- ¹ - Ground surface elevations and top of casing elevations were surveyed in 2013 & 2014 by Sparr Surveys of McKinney, Texas.
Ground surface elevation and top of casing elevation for LMW-9R was surveyed on March 7, 2016 by Brittain & Crawford, LLC of Fort Worth, Texas.
Ground surface elevations and top of casing elevations for MW-47 and MW-41 were surveyed on June 13, 2017 by Brittain & Crawford, LLC of Fort Worth, Texas.

- ² - Groundwater elevation obtained by subtracting the depth to water from the top of casing elevation.

- ³ - Well casing volume = $\frac{\pi D^2}{4} * 7.5 * \text{Water Column Height}$ where 7.5 is a factor conversion from cubic feet to gallons, and D is the diameter of the casing.

Groundwater level measurements collected on September 11, 2023.

AMSL - above mean sea level

BTOC - below top of casing

BGS - below ground surface

NM - not measured

CAMU - Corrective Action Management Unit

Prepared by: JDH 9/27/23

Checked by: CAM 12/27/2023

Reviewed by: TJ 1/16/2024

TABLE 2
FOURTH QUARTER 2023
SUMMARY OF MONITORING WELL DATA
NORTH CAMU
FRISCO COMMUNITY DEVELOPMENT CORPORATION SITE
FRISCO, TEXAS

Well ID	Date Drilled	Ground Surface Elevation ¹ (feet AMSL)	Top of Casing Elevation ¹ (feet AMSL)	Depth to Water (feet BTOC)	Groundwater Elevation ² (feet AMSL)	Depth of Well (feet BTOC)	Screened Interval (feet BGS)	Well Diameter (inches)	Water Column Length (feet)	Well Casing Volume ³ (gallons)	Actual Volume Purged (gallons)
MW-45	1/14/2014	657.90	660.86	13.29	647.57	22.55	10-20	2	9.26	1.5	1.25
PMW-19R	2/26/2013	678.45	681.79	20.66	661.13	22.70	4-19	2	2.04	0.3	1.00
LMW-9R	3/1/2016	661.39	664.31	15.54	648.77	15.54	15-30	2	0.00	0.0	1.25
LMW-8	2/4/1995	645.57	648.72	14.83	633.89	24.05	7-21.5	2	9.22	1.5	1.25
LMW-22	2/27/2013	643.32	646.99	15.76	631.23	23.15	5-20	2	7.39	1.2	1.25
LMW-17	7/24/1995	646.34	648.70	17.59	631.11	25.45	10-20	4	7.86	5.1	1.00
LMW-5	2/3/1995	643.27	646.07	14.77	631.30	25.25	7-21.5	2	10.48	1.7	1.00
LMW-21	2/27/2013	645.12	648.28	16.82	631.46	28.07	10-25	2	11.25	1.8	1.00
PMW-20R	2/26/2013	645.20	648.09	16.58	631.51	28.25	10-25	2	11.67	1.9	1.25
MW-41	1/14/2014	639.17	642.17	9.79	632.38	19.15	6-16	2	9.36	1.5	1.00
MW-47	5/2/2017	635.65	638.28	7.56	630.72	17.95	7.5-15	2	10.39	1.7	1.25
MW-42	1/14/2014	638.71	642.24	8.03	634.21	NS	5-15	2	NS	NS	NS
P-1	5/8/1990	645.95	647.24	11.72	635.52	NS	10-20	2	NS	NS	NS

Notes

- ¹ - Ground surface elevations and top of casing elevations were surveyed in 2013 & 2014 by Sparr Surveys of McKinney, Texas.
Ground surface elevation and top of casing elevation for LMW-9R was surveyed on March 7, 2016 by Brittain & Crawford, LLC of Fort Worth, Texas.
Ground surface elevations and top of casing elevations for MW-47 and MW-41 were surveyed on June 13, 2017 by Brittain & Crawford, LLC of Fort Worth, Texas.

- ² - Groundwater elevation obtained by subtracting the depth to water from the top of casing elevation.

- ³ - Well casing volume = $\frac{\pi D^2}{4} * 7.5 * \text{Water Column Length}$ where 7.5 is a factor conversion from cubic feet to gallons, and D is the diameter of the casing.

Groundwater levels measurements collected on November 29, 2023.

AMSL - above mean sea level

BGS - below ground surface

BTOC - below top of casing

CAMU - Corrective Action Management Unit

NS - not sampled

Prepared by: ML 12/22/23
Checked by: CM 12/26/2023
Reviewed by: TJ 1/16/2024

TABLE 3
THIRD QUARTER 2023
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
CLASS 2 LANDFILL NORTH CAMU
FRISCO COMMUNITY DEVELOPMENT CORPORATION SITE
FRISCO, TEXAS

Monitoring Well				PMW-20R	SDL	LMW-5	SDL	LMW-21	SDL	MW-45	SDL	MW-41	SDL	PMW-19R	SDL
Lab Sample ID				HS23090922-07		HS23090922-05		HS23090922-06		HS23090922-01		HS23090922-08		HS23090922-02	
Date Sampled				9/11/2023		9/11/2023		9/11/2023		9/11/2023		9/11/2023		9/11/2023	
Time Sampled				14:05		12:45		13:25		9:55		14:45		10:30	
Metals (USEPA Method 6020A) Total Recoverable															
Date Prepared				9/19/2023		9/19/2023		9/19/2023		9/19/2023		9/19/2023		9/19/2023	
Date Analyzed				9/20/2023		9/20/2023		9/20/2023		9/20/2023		9/20/2023		9/20/2023	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Antimony	7440-36-0	0.006	0.006	NS		NS		NS		NS		NS		NS	
Arsenic	7440-38-2	0.01	0.01	0.000400	U	0.000400	0.000400	U	0.000400	0.000707	J	0.000400	0.000400	U	0.000400
Barium	7440-39-3	2	2	NS		NS		NS		NS		NS		NS	
Cadmium	7440-43-9	0.005	0.005	0.000200	U	0.000200	0.000200	U	0.000200	0.000200	U	0.000200	0.000200	U	0.000200
Chromium	7440-47-3	0.1	0.1	NS		NS		NS		NS		NS		NS	
Copper	7440-50-8	1.3	1.3	NS		NS		NS		NS		NS		NS	
Lead	7439-92-1	0.015	0.015	0.000600	U	0.000600	0.001300	J	0.000600	0.003030	J	0.000600	0.000600	U	0.000600
Selenium	7782-49-2	0.05	0.05	0.00269		0.00110	0.00110	U	0.00110	0.00619		0.00110	0.00110	U	0.00110
Silver	7440-22-4	0.12	0.37	NS		NS		NS		NS		NS		NS	
Zinc	7440-66-6	7.3	22	NS		NS		NS		NS		NS		NS	
Metals (USEPA Method 6020A) Dissolved															
Date Prepared				9/20/2023		9/20/2023		9/20/2023		9/20/2023		9/20/2023		9/20/2023	
Date Analyzed				9/20/2023		9/20/2023		9/20/2023		9/20/2023		9/20/2023		9/20/2023	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Antimony	7440-36-0	0.006	0.006	NS		NS		NS		NS		NS		NS	
Arsenic	7440-38-2	0.01	0.01	0.000400	U	0.000400	0.000466	J	0.000400	0.000917	J	0.000400	0.000400	U	0.000400
Barium	7440-39-3	2	2	NS		NS		NS		NS		NS		NS	
Cadmium	7440-43-9	0.005	0.005	0.000200	U	0.000200	0.000200	U	0.000200	0.000200	U	0.000200	0.000200	U	0.000200
Chromium	7440-47-3	0.1	0.1	NS		NS		NS		NS		NS		NS	
Copper	7440-50-8	1.3	1.3	NS		NS		NS		NS		NS		NS	
Lead	7439-92-1	0.015	0.015	0.000600	U	0.000600	0.000600	U	0.000600	0.008270	J	0.000600	0.000600	U	0.000600
Selenium	7782-49-2	0.05	0.05	0.00210		0.00110	0.00110	U	0.00110	0.00584		0.00110	0.00110	U	0.00110
Silver	7440-22-4	0.12	0.37	NS		NS		NS		NS		NS		NS	
Zinc	7440-66-6	7.3	22	NS		NS		NS		NS		NS		NS	
Mercury (USEPA Method 7470A)															
Date Prepared				NS		NS		NS		NS		NS		NS	
Date Analyzed				NS		NS		NS		NS		NS		NS	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Mercury	7439-97-6	0.002	0.002	NS		NS		NS		NS		NS		NS	
Mercury (USEPA Method 7470A) Dissolved															
Date Prepared				NS		NS		NS		NS		NS		NS	
Date Analyzed				NS		NS		NS		NS		NS		NS	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Mercury	7439-97-6	0.002	0.002	NS		NS		NS		NS		NS		NS	

Notes
Results in ***bold italics*** denote detections.
USEPA - United States Environmental Protection Agency.
RAL - Residential Assessment Level.
PCL - Protective Concentration Level.
SDL - Sample Detection Limit.
TRRP - Texas Risk Reduction Program.
mg/L - Milligrams per liter.
CAMU - Corrective Action Management Unit.
¹ - The Groundwater Residential Assessment Level (GW RAL) is the TRRP Tier 1 Residential ^{GW}GW_{ing} PCL applicable for Class 2 groundwater ingestion.
² - The Groundwater Critical PCL is the TRRP Tier 1 Commercial/Industrial ^{GW}GW_{ing} PCL applicable for Class 2 groundwater ingestion.

Flags and Qualifiers
U - Analyte was not detected at or above the Sample Detection Limit (SDL).
J - Result is an estimated value.

Prepared by: ML 12/22/2023
Checked by: CM 12/26/2023
Reviewed by: TJ 1/16/2024

TABLE 3
THIRD QUARTER 2023
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
CLASS 2 LANDFILL NORTH CAMU
FRISCO COMMUNITY DEVELOPMENT CORPORATION SITE
FRISCO, TEXAS

Monitoring Well				LMW-9R	SDL	LMW-8	SDL	LMW-17	SDL	LMW-22	SDL	MW-47	SDL	DUP-01	SDL				
Lab Sample ID				HS23090922-010		HS23090922-03		HS23090922-04		HS23090922-11		HS23090922-09		HS23090922-12					
Date Sampled				9/12/2023		9/11/2023		9/11/2023		9/12/2023		9/11/2023		9/12/2023					
Time Sampled				8:45		11:10		12:05		9:30		15:30		12:45					
Metals (USEPA Method 6020A) Total Recoverable																			
Date Prepared				9/19/2023				9/19/2023				9/19/2023							
Date Analyzed				9/20/2023		9/20/2023		9/20/2023		9/20/2023		9/20/2023		9/20/2023					
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)					
Antimony	7440-36-0	0.006	0.006	NS		NS		NS		NS		NS		NS					
Arsenic	7440-38-2	0.01	0.01	0.00238	0.000400	0.000829	J	0.000400	0.000405	J	0.000400	0.00777	0.000400	0.00637	0.000401	J	0.000400		
Barium	7440-39-3	2	2	NS		NS		NS		NS		NS		NS		NS			
Cadmium	7440-43-9	0.005	0.005	0.000200	U	0.000200	U	0.000200	0.000200	U	0.000200	0.000200	U	0.000200	0.000200	U	0.000200		
Chromium	7440-47-3	0.1	0.1	NS		NS		NS		NS		NS		NS		NS			
Copper	7440-50-8	1.3	1.3	NS		NS		NS		NS		NS		NS		NS			
Lead	7439-92-1	0.015	0.015	0.000600	U	0.000600		0.000600	0.000600	U	0.000600	0.000600	U	0.000600	0.000600	0.000869	J	0.000600	
Selenium	7782-49-2	0.05	0.05	0.00276		0.00110	U	0.00110	0.00110	U	0.00110	0.00110	U	0.00110	0.00110	0.00110	U	0.00110	
Silver	7440-22-4	0.12	0.37	NS		NS		NS		NS		NS		NS		NS			
Zinc	7440-66-6	7.3	22	NS		NS		NS		NS		NS		NS		NS			
Metals (USEPA Method 6020A) Dissolved																			
Date Prepared				9/19/2023				9/20/2023				9/20/2023				9/20/2023			
Date Analyzed				9/20/2023		9/20/2023		9/20/2023		9/20/2023		9/20/2023		9/20/2023		9/20/2023		9/20/2023	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Antimony	7440-36-0	0.006	0.006	NS		NS		NS		NS		NS		NS		NS		NS	
Arsenic	7440-38-2	0.01	0.01	0.00282	0.000400	0.000658	J	0.000400	0.000595	J	0.000400	0.00978	0.000400	0.00778	0.000400	0.000447	J	0.000400	
Barium	7440-39-3	2	2	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	7440-43-9	0.005	0.005	0.000200	U	0.000200	U	0.000200	0.000200	U	0.000200	0.000200	U	0.000200	0.000200	0.000200	U	0.000200	
Chromium	7440-47-3	0.1	0.1	NS		NS		NS		NS		NS		NS		NS		NS	
Copper	7440-50-8	1.3	1.3	NS		NS		NS		NS		NS		NS		NS		NS	
Lead	7439-92-1	0.015	0.015	0.000600	U	0.000600		0.000600	0.000600	U	0.000600	0.000916	J	0.000600	0.000600	0.000600	U	0.000600	
Selenium	7782-49-2	0.05	0.05	0.00373	0.00110	0.00214		0.00110	0.00110	U	0.00110	0.00110	U	0.00110	0.00110	0.00110	U	0.00110	
Silver	7440-22-4	0.12	0.37	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	7440-66-6	7.3	22	NS		NS		NS		NS		NS		NS		NS		NS	
Mercury (USEPA Method 7470A)																			
Date Prepared				NS		NS		NS		NS		NS		NS		NS		NS	
Date Analyzed				NS		NS		NS		NS		NS		NS		NS		NS	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Mercury	7439-97-6	0.002	0.002	NS		NS		NS		NS		NS		NS		NS		NS	
Mercury (USEPA Method 7470A) Dissolved																			
Date Prepared				NS		NS		NS		NS		NS		NS		NS		NS	
Date Analyzed				NS		NS		NS		NS		NS		NS		NS		NS	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Mercury	7439-97-6	0.002	0.002	NS		NS		NS		NS		NS		NS		NS		NS	

Notes
Results in ***bold italics*** denote detections.
USEPA - United States Environmental Protection Agency.
RAL - Residential Assessment Level.
PCL - Protective Concentration Level.
SDL - Sample Detection Limit.
TRRP - Texas Risk Reduction Program.
mg/L - Milligrams per liter.
CAMU - Corrective Action Management Unit.
¹ - The Groundwater Residential Assessment Level (GW RAL) is the TRRP Tier 1 Residential^{GW}GW_{ing} PCL applicable for Class 2 groundwater ingestion.
² - The Groundwater Critical PCL is the TRRP Tier 1 Commercial/Industrial^{GW}GW_{ing} PCL applicable for Class 2 groundwater ingestion.

Flags and Qualifiers
U - Analyte was not detected at or above the Sample Detection Limit (SDL).
J - Result is an estimated value.

Prepared by: ML 12/22/2023
Checked by: CM 12/26/2023
Reviewed by: TJ 1/16/2024

TABLE 4
FOURTH QUARTER 2023
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
CLASS 2 LANDFILL NORTH CAMU
FRISCO COMMUNITY DEVELOPMENT CORPORATION SITE
FRISCO, TEXAS

Monitoring Well				PMW-20R	SDL	LMW-5	SDL	LMW-21	SDL	MW-45	SDL	MW-41	SDL	PMW-19R	SDL	
Lab Sample ID				HS23120154-08		HS23120154-05		HS23120154-06		HS23120154-01		HS23120154-09		HS23120154-02		
Date Sampled				11/29/2023		11/29/2023		11/29/2023		11/29/2023		11/29/2023		11/29/2023		
Time Sampled				13:45		12:15		12:55		9:45		14:30		10:20		
Metals (USEPA Method 6020A) Total Recoverable																
Date Prepared				12/6/2023				12/6/2023				12/6/2023				
Date Analyzed				12/7/2023		12/7/2023		12/7/2023		12/7/2023		12/7/2023		12/7/2023		
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		
Antimony	7440-36-0	0.006	0.006	NS		NS		NS		NS		NS		NS		
Arsenic	7440-38-2	0.01	0.01	0.000400	U	0.000400	0.000400	U	0.000400	0.000499	J	0.000400	0.000400	U	0.000400	
Barium	7440-39-3	2	2	NS		NS		NS		NS		NS		NS		
Cadmium	7440-43-9	0.005	0.005	0.000200	U	0.000200	0.000200	U	0.000200	0.000200	U	0.000200	0.000200	U	0.000200	
Chromium	7440-47-3	0.1	0.1	NS		NS		NS		NS		NS		NS		
Copper	7440-50-8	1.3	1.3	NS		NS		NS		NS		NS		NS		
Lead	7439-92-1	0.015	0.015	0.000600	U	0.000600	0.000600	U	0.000600	0.000600	U	0.000600	0.000600	U	0.000600	
Selenium	7782-49-2	0.05	0.05	0.00355	U	0.00110	0.00229	U	0.00110	0.00597	U	0.00199	0.00113	U	0.00110	
Silver	7440-22-4	0.12	0.37	NS		NS		NS		NS		NS		NS		
Zinc	7440-66-6	7.3	22	NS		NS		NS		NS		NS		NS		
Metals (USEPA Method 6020A) Dissolved																
Date Prepared				12/6/2023				12/6/2023				12/6/2023				
Date Analyzed				12/7/2023		12/7/2023		12/7/2023		12/7/2023		12/7/2023		12/7/2023		
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		
Antimony	7440-36-0	0.006	0.006	NS		NS		NS		NS		NS		NS		
Arsenic	7440-38-2	0.01	0.01	0.000400	U	0.000400	0.000487	J	0.000400	0.000545	J	0.000400	0.000400	U	0.000400	
Barium	7440-39-3	2	2	NS		NS		NS		NS		NS		NS		
Cadmium	7440-43-9	0.005	0.005	0.000200	U	0.000200	0.000200	U	0.000200	0.000200	U	0.000200	0.000200	U	0.000200	
Chromium	7440-47-3	0.1	0.1	NS		NS		NS		NS		NS		NS		
Copper	7440-50-8	1.3	1.3	NS		NS		NS		NS		NS		NS		
Lead	7439-92-1	0.015	0.015	0.000600	U	0.000600	0.000600	U	0.000600	0.000673	J	0.000600	0.000600	U	0.000600	
Selenium	7782-49-2	0.05	0.05	0.00291		0.00110	0.00110	U	0.00110	0.00460		0.00139	J	0.00110	0.00195	J
Silver	7440-22-4	0.12	0.37	NS		NS		NS		NS		NS		NS		
Zinc	7440-66-6	7.3	22	NS		NS		NS		NS		NS		NS		
Mercury (USEPA Method 7470A)																
Date Prepared				NS				NS				NS				
Date Analyzed				NS				NS				NS				
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		
Mercury	7439-97-6	0.002	0.002	NS		NS		NS		NS		NS		NS		
Mercury (USEPA Method 7470A) Dissolved																
Date Prepared				NS				NS				NS				
Date Analyzed				NS				NS				NS				
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		
Mercury	7439-97-6	0.002	0.002	NS		NS		NS		NS		NS		NS		

Notes
Results in ***bold italics*** denote detections.
USEPA - United States Environmental Protection Agency.
RAL - Residential Assessment Level.
PCL - Protective Concentration Level.
SDL - Sample Detection Limit.
TRRP - Texas Risk Reduction Program.
mg/L - Milligrams per liter.
CAMU - Corrective Action Management Unit.
¹ - The Groundwater Residential Assessment Level (GW RAL) is the TRRP Tier 1 Residential ^{GW}GW_{ing} PCL applicable for Class 2 groundwater ingestion.
² - The Groundwater Critical PCL is the TRRP Tier 1 Commercial/Industrial ^{GW}GW_{ing} PCL applicable for Class 2 groundwater ingestion.

Flags and Qualifiers
U - Analyte was not detected at or above the Sample Detection Limit (SDL).
J - Result is an estimated value.

Prepared by: ML 12/22/2023
Checked by: CM 12/26/2023
Reviewed by: TJ 1/16/2024

TABLE 4
FOURTH QUARTER 2023
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
CLASS 2 LANDFILL NORTH CAMU
FRISCO COMMUNITY DEVELOPMENT CORPORATION SITE
FRISCO, TEXAS

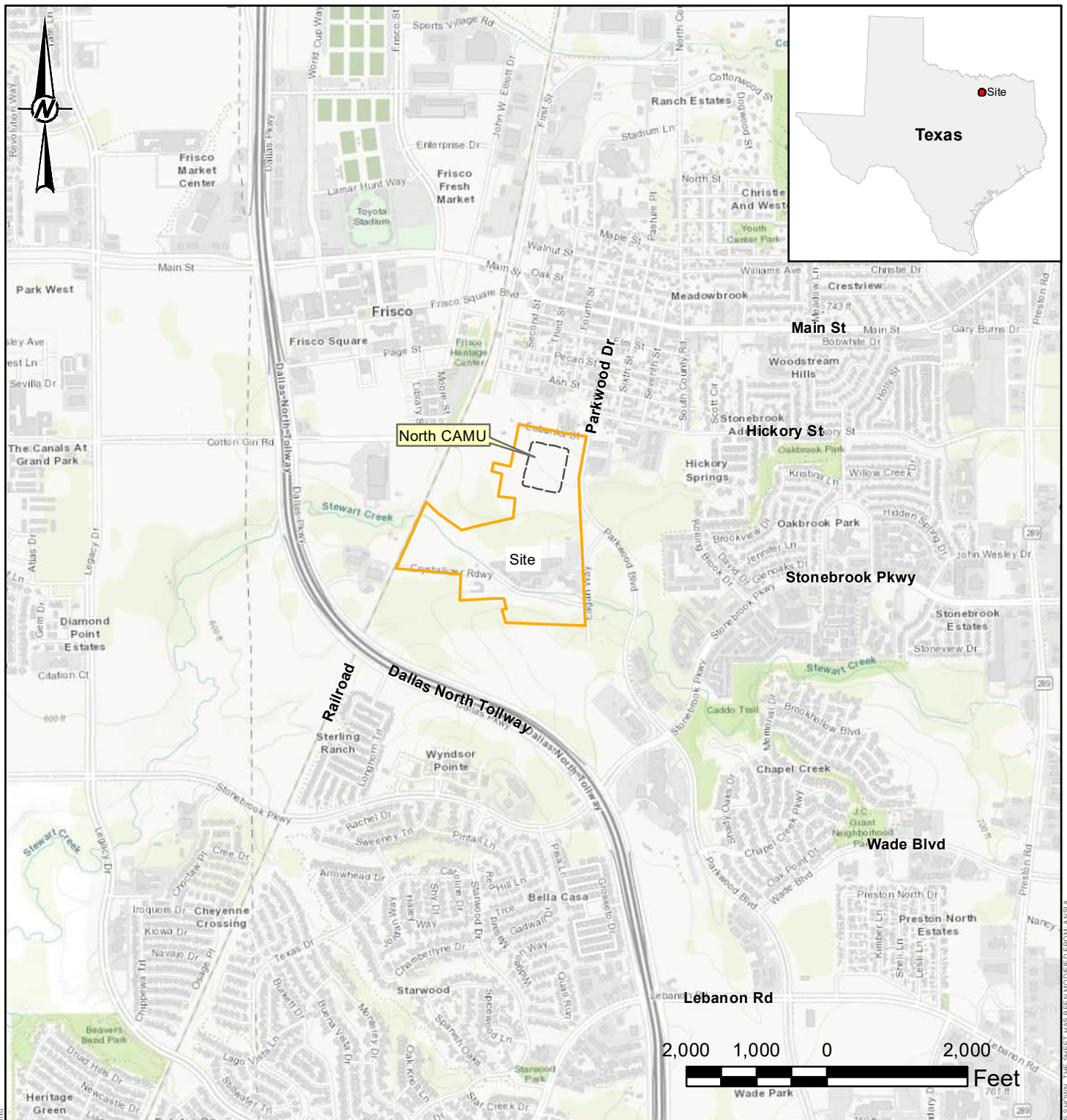
Monitoring Well				LMW-9R	SDL	LMW-8	SDL	LMW-17	SDL	LMW-22	SDL	MW-47	SDL	DUP-01	SDL
Lab Sample ID				HS23120154-11		HS23120154-03		HS23120154-04		HS23120154-12		HS23120154-10		HS23120154-07	
Date Sampled				11/30/2023		11/29/2023		11/29/2023		11/30/2023		11/29/2023		11/29/2023	
Time Sampled				8:15		11:05		11:40		8:55		15:20		12:15	
Metals (USEPA Method 6020A) Total Recoverable															
Date Prepared				12/6/2023				12/6/2023				12/6/2023			
Date Analyzed				12/7/2023		12/7/2023		12/7/2023		12/7/2023		12/7/2023		12/7/2023	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Antimony	7440-36-0	0.006	0.006	NS		NS		NS		NS		NS		NS	
Arsenic	7440-38-2	0.01	0.01	0.000717 J	0.000400	0.000531 J	0.000400	0.000711 J	0.000400	0.00142 J	0.000400	0.000400 U	0.000400	0.000400 U	0.000400
Barium	7440-39-3	2	2	NS		NS		NS		NS		NS		NS	
Cadmium	7440-43-9	0.005	0.005	0.000200 U	0.000200	0.000200 U	0.000200	0.000200 U	0.000200	0.000200 U	0.000200	0.000200 U	0.000200	0.000200 U	0.000200
Chromium	7440-47-3	0.1	0.1	NS		NS		NS		NS		NS		NS	
Copper	7440-50-8	1.3	1.3	NS		NS		NS		NS		NS		NS	
Lead	7439-92-1	0.015	0.015	0.000600 U	0.000600	0.000600 U	0.000600	0.000600 U	0.000600	0.000600 U	0.000600	0.000600 U	0.000600	0.000600 U	0.000600
Selenium	7782-49-2	0.05	0.05	0.00210 U	0.00110	0.00110 U	0.00110	0.00233 U	0.00110	0.00279 U	0.00110	0.00486 U	0.00110	0.00224 U	0.00110
Silver	7440-22-4	0.12	0.37	NS		NS		NS		NS		NS		NS	
Zinc	7440-66-6	7.3	22	NS		NS		NS		NS		NS		NS	
Metals (USEPA Method 6020A) Dissolved															
Date Prepared				12/6/2023				12/6/2023				12/6/2023			
Date Analyzed				12/7/2023		12/7/2023		12/7/2023		12/7/2023		12/7/2023		12/7/2023	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Antimony	7440-36-0	0.006	0.006	NS		NS		NS		NS		NS		NS	
Arsenic	7440-38-2	0.01	0.01	0.000918 J	0.000400	0.000572 J	0.000400	0.000662 J	0.000400	0.00132 J	0.000400	0.000400 U	0.000400	0.000400 U	0.000400
Barium	7440-39-3	2	2	NS		NS		NS		NS		NS		NS	
Cadmium	7440-43-9	0.005	0.005	0.000200 U	0.000200	0.000200 U	0.000200	0.000200 U	0.000200	0.000200 U	0.000200	0.000200 U	0.000200	0.000200 U	0.000200
Chromium	7440-47-3	0.1	0.1	NS		NS		NS		NS		NS		NS	
Copper	7440-50-8	1.3	1.3	NS		NS		NS		NS		NS		NS	
Lead	7439-92-1	0.015	0.015	0.000600 U	0.000600	0.000600 U	0.000600	0.000600 U	0.000600	0.000600 U	0.000600	0.000600 U	0.000600	0.000600 U	0.000600
Selenium	7782-49-2	0.05	0.05	0.00110 U	0.00110	0.00110 U	0.00110	0.00110 U	0.00110	0.00116 J	0.00110	0.00333	0.00110	0.00110 U	0.00110
Silver	7440-22-4	0.12	0.37	NS		NS		NS		NS		NS		NS	
Zinc	7440-66-6	7.3	22	NS		NS		NS		NS		NS		NS	
Mercury (USEPA Method 7470A)															
Date Prepared				NS		NS		NS		NS		NS		NS	
Date Analyzed				NS		NS		NS		NS		NS		NS	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Mercury	7439-97-6	0.002	0.002	NS		NS		NS		NS		NS		NS	
Mercury (USEPA Method 7470A) Dissolved															
Date Prepared				NS		NS		NS		NS		NS		NS	
Date Analyzed				NS		NS		NS		NS		NS		NS	
Analyte	CAS No.	RAL ¹ (mg/L)	PCL ² (mg/L)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Mercury	7439-97-6	0.002	0.002	NS		NS		NS		NS		NS		NS	

Notes
Results in ***bold italics*** denote detections.
USEPA - United States Environmental Protection Agency.
RAL - Residential Assessment Level.
PCL - Protective Concentration Level.
SDL - Sample Detection Limit.
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¹ - The Groundwater Residential Assessment Level (GW RAL) is the TRRP Tier 1 Residential^{GW}GW_{ing} PCL applicable for Class 2 groundwater ingestion.
² - The Groundwater Critical PCL is the TRRP Tier 1 Commercial/Industrial^{GW}GW_{ing} PCL applicable for Class 2 groundwater ingestion.

Flags and Qualifiers
U - Analyte was not detected at or above the Sample Detection Limit (SDL).
J - Result is an estimated value.

Prepared by: ML 12/22/2023
Checked by: CM 12/26/2023
Reviewed by: TJ 1/16/2024

Figures



LEGEND

Former Operating Plant Property Boundary

NOTES:

1. CAMU – CORRECTIVE ACTION MANAGEMENT UNIT

REFERENCE

1.BASE MAP - SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDINANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

CLIENT

FRISCO COMMUNITY DEVELOPMENT CORPORATION
FRISCO, TX

PROJECT

NORTH CAMU GROUNDWATER MONITORING

TITLE

SITE LOCATION MAP

CONSULTANT



YYYY-MM-DD 04/19/2021

PREPARED SJRS

DESIGN SJRS

REVIEW EPF

APPROVED AMF

PROJECT No.
20409062

CONTROL
20409062A003.mxd

Rev.
0

FIGURE
1



LEGEND

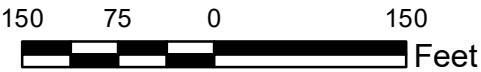
- Monitoring Well Location
- Approximate Extent of Disposal Area
- Former Operating Plant Property Boundary

NOTES

- LMW-9 COLLAPSED AND WAS REPLACED WITH LMW-9R IN MARCH 2016 AND LMW-9 WAS SUBSEQUENTLY ABANDONED IN MAY 2017.
- MW-47 WAS INSTALLED ON MAY 2, 2017.
- CAMU – CORRECTIVE ACTION MANAGEMENT UNIT

REFERENCE

- AERIAL IMAGERY - SOURCE: ESRI, MAXAR, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRIID, IGN, AND THE GIS USER COMMUNITY SITE AERIAL IMAGERY - PROVIDED BY DALLAS AERIAL SURVEY, DATED APRIL, 2017.



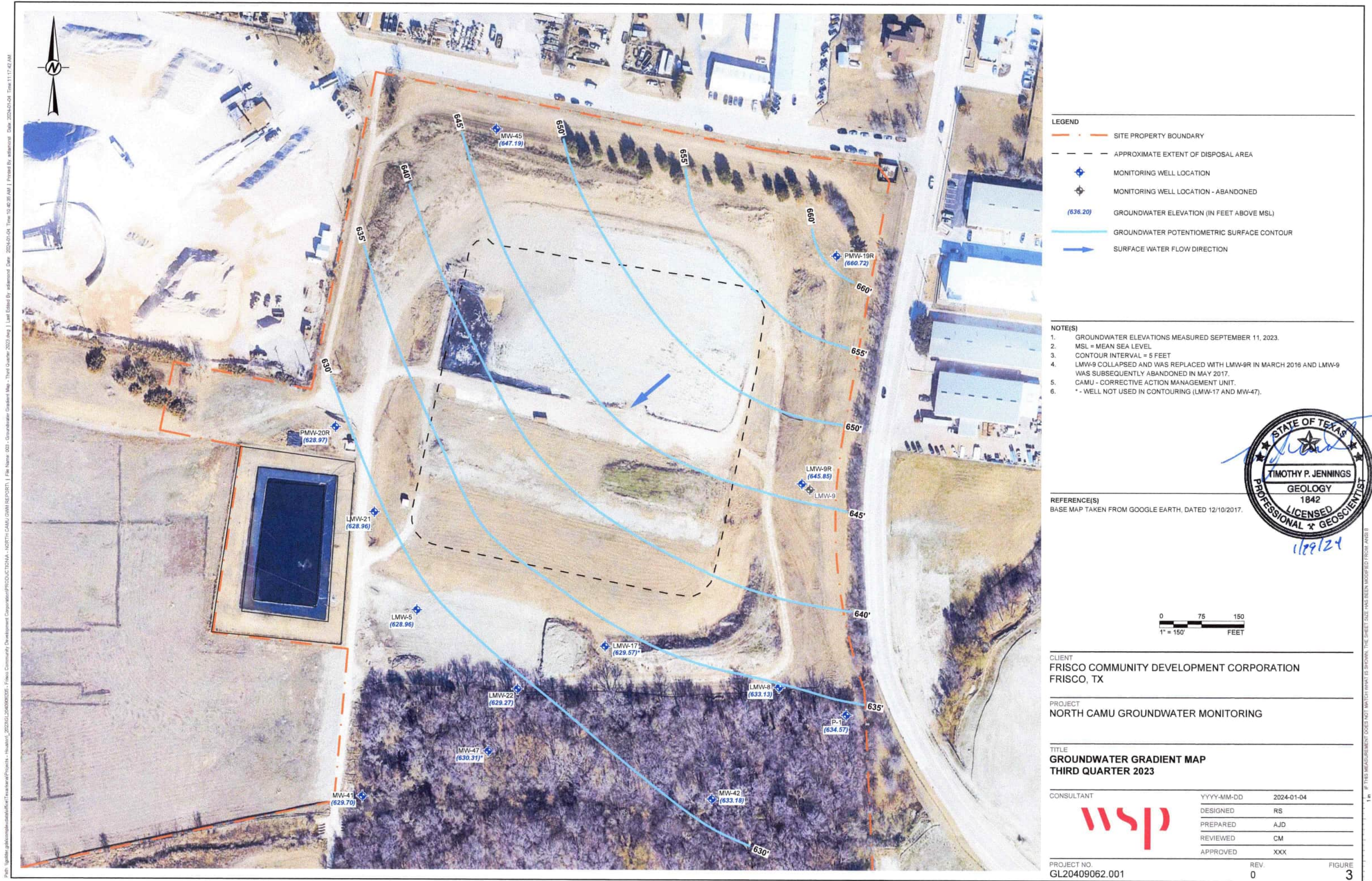
CLIENT
FRISCO COMMUNITY DEVELOPMENT CORPORATION
FRISCO, TX

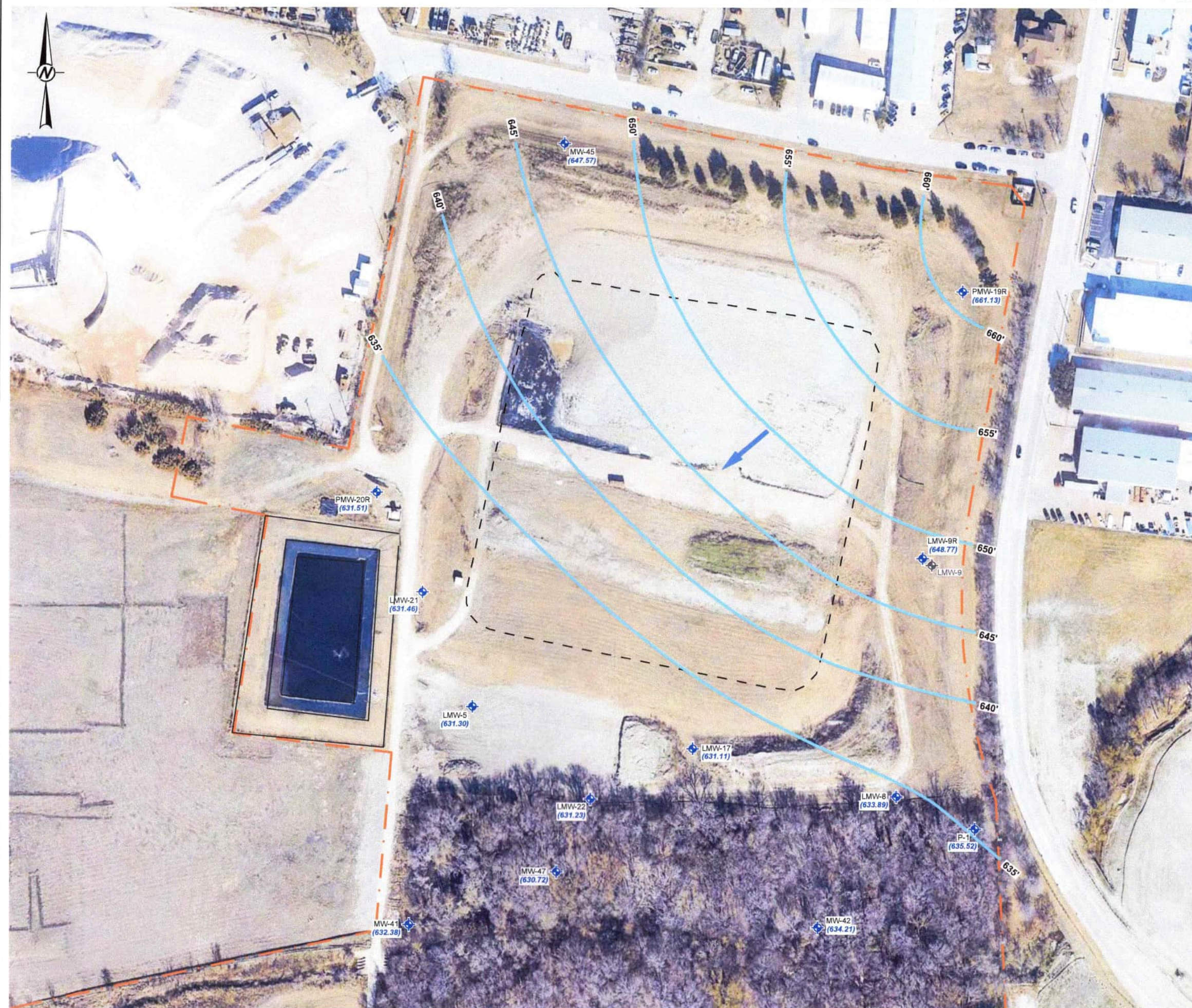
PROJECT
NORTH CAMU GROUNDWATER MONITORING

TITLE
MONITORING WELL LOCATION MAP

	CONSULTANT	YYYY-MM-DD	04/19/2021
	PREPARED	SJRS	
	DESIGN	SJRS	
	REVIEW	EPF	
	APPROVED	AMF	

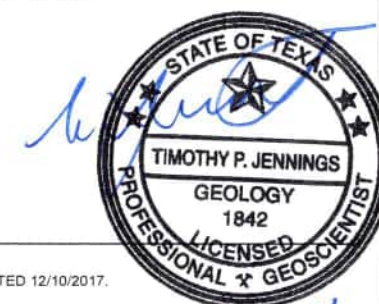
PROJECT No. 20409062	CONTROL 20409062A004.mxd	Rev. 0	FIGURE 2
-------------------------	-----------------------------	-----------	--------------------





LEGEND

NOTE(S)



REFERENCE(S)



CLIENT
FRISCO COMMUNITY DEVELOPMENT CORPORATION
FRISCO, TX

PROJECT NO.
GL20409062.001

APPENDIX A

Monitoring Well Inspection Forms



Project No.: 130-2086-05

Sheet 1 of 1



Project No.: 2040906201

APPENDIX B

Groundwater Sampling Forms

GOLDER

Project No.: 130-2086-05[illegible]



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: Exide North CAMU Groundwater MonitoringProject No. : 130-2086-05

WEATHER CONDITIONS

Temperature 80° Weather cloudy

SAMPLE INFORMATION

Sample Location LMW-22 Sample No. LMW-22
Sample Date 9-12-23 Time 0930 Sample By JTB
Sample Method Peristaltic Pump Sample Type Grab

Begin Purge @ 0905 Water Level Before Purging: 17.72 FT BTOC TD: 23.15 FT BTOC
@ 250 mL/min Well Volume: 5.43 FT x 0.163 gal/FT = 0.90 gallons
Volume Water Removed Before Sampling: 1.25 gallons
Water Level Before Sampling: 18.06 FT BTOC
Water Level After Sampling: 18.08 FT BTOC
Appearance of Sample: clear, no odor

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>0910</u>	<u>0915</u>	<u>0920</u>	<u>0925</u>	<u>0930</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>	<u>1.0</u>	<u>1.25</u>
pH	Standard	<u>6.71</u>	<u>6.76</u>	<u>6.89</u>	<u>6.86</u>	<u>6.87</u>
Spec. Cond.	mS/CM	<u>0.727</u>	<u>0.816</u>	<u>0.839</u>	<u>0.831</u>	<u>0.834</u>
Turbidity	NTU	<u>4.6</u>	<u>5.7</u>	<u>5.1</u>	<u>5.2</u>	<u>5.4</u>
Temperature	°C	<u>19.47</u>	<u>19.46</u>	<u>19.56</u>	<u>19.51</u>	<u>19.52</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>
Water Level	FT BTOC	<u>17.91</u>	<u>17.96</u>	<u>18.02</u>	<u>18.06</u>	<u>18.08</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS: NONE

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE
Stainless Steel
Teflon

Peristaltic Pump
Submersible Pump
Hand Pump

Air-Lift Pump
Other _____

**GOLDER****GROUNDWATER SAMPLE COLLECTION FORM**Project Ref: Exide North CAMU Groundwater MonitoringProject No. : 130-2086-05**WEATHER CONDITIONS**

Temperature

72°

Weather

cloudy**SAMPLE INFORMATION**Sample Location LMW-9RSample No. LMW-9RSample Date 9-12-23Time 0845Sample By STBSample Method Peristaltic PumpSample Type Grab

Begin Purge @

0820

Water Level Before Purging:

18.46

FT BTOC

TD:

32.92

FT BTOC

Well Volume: 14.46

FT

x 0.163 gal/FT = 2.4

gallons

@ 250 mL/min

Volume Water Removed Before Sampling:

1.25

gallons

Water Level Before Sampling:

18.82

FT BTOC

Water Level After Sampling:

18.82

FT BTOC

Appearance of Sample:

clear, no odor**FIELD MEASUREMENTS**

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>0825</u>	<u>0830</u>	<u>0835</u>	<u>0840</u>	<u>0845</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>	<u>1.0</u>	<u>1.25</u>
pH	Standard	<u>6.36</u>	<u>6.57</u>	<u>6.69</u>	<u>6.71</u>	<u>6.70</u>
Spec. Cond.	mS/CM	<u>2.313</u>	<u>2.174</u>	<u>2.017</u>	<u>2.023</u>	<u>2.067</u>
Turbidity	NTU	<u>4.7</u>	<u>6.7</u>	<u>7.1</u>	<u>7.2</u>	<u>7.0</u>
Temperature	°C	<u>20.9</u>	<u>20.6</u>	<u>20.7</u>	<u>20.3</u>	<u>20.4</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>
Water Level	FT BTOC	<u>18.77</u>	<u>18.79</u>	<u>18.83</u>	<u>18.82</u>	<u>18.82</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS:

NONE

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE

Stainless Steel

Teflon

☒ Peristaltic Pump☐ Submersible Pump☐ Hand Pump☐ Air-Lift Pump

Other _____



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: Exide North CAMU Groundwater MonitoringProject No. : 130-2086-05

WEATHER CONDITIONS

Temperature

850

Weather

cloudy

SAMPLE INFORMATION

Sample Location MW-47Sample No. MW-47Sample Date 9-11-23Time 1530Sample By JTBSample Method Peristaltic PumpSample Type Grab

Begin Purge @

Water Level Before Purging:

7.97

FT BTOC

TD: 17.95

FT BTOC

@ 1505

Well Volume:

9.98

FT

x 0.163 gal/FT =

1.6

gallons

@ 250 mL/min

Volume Water Removed Before Sampling:

1.25

gallons

Water Level Before Sampling:

8.28

FT BTOC

Water Level After Sampling:

8.30

FT BTOC

Appearance of Sample:

clear, no odor

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1510</u>	<u>1515</u>	<u>1520</u>	<u>1525</u>	<u>1530</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>	<u>1.0</u>	<u>1.25</u>
pH	Standard	<u>6.46</u>	<u>6.49</u>	<u>6.71</u>	<u>6.72</u>	<u>6.71</u>
Spec. Cond.	mS/CM	<u>1.234</u>	<u>1.4167</u>	<u>1.479</u>	<u>1.476</u>	<u>1.471</u>
Turbidity	NTU	<u>3.6</u>	<u>4.1</u>	<u>4.4</u>	<u>4.1</u>	<u>4.2</u>
Temperature	°C	<u>19.3</u>	<u>19.6</u>	<u>19.7</u>	<u>19.4</u>	<u>19.6</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>
Water Level	FT BTOC	<u>8.17</u>	<u>8.23</u>	<u>8.26</u>	<u>8.28</u>	<u>8.30</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS: NONE

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE

Stainless Steel

Teflon

☒ Peristaltic Pump☐ Submersible Pump☐ Hand Pump☐ Air-Lift Pump

Other _____



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: Exide North CAMU Groundwater MonitoringProject No. : 130-2086-05

WEATHER CONDITIONS

Temperature 85° Weather cloudy

SAMPLE INFORMATION

Sample Location MW-41 Sample No. MW-41
Sample Date 9-11-23 Time 1445 Sample By JTB
Sample Method Peristaltic Pump Sample Type Grab

Begin Purge @ 1425 Water Level Before Purging: 12.47 FT BTOC TD: 19.15 FT BTOC
Well Volume: 6.68 FT x 0.163 gal/FT = 1.0 gallons
@ 250 mL/min Volume Water Removed Before Sampling: 1.00 gallons
Water Level Before Sampling: 12.73 FT BTOC
Water Level After Sampling: 12.73 FT BTOC
Appearance of Sample: clear, no odor

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1430</u>	<u>1435</u>	<u>1440</u>		<u>1445</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>		<u>1.00</u>
pH	Standard	<u>6.77</u>	<u>6.81</u>	<u>6.83</u>		<u>6.83</u>
Spec. Cond.	mS/CM	<u>0.941</u>	<u>0.979</u>	<u>0.974</u>		<u>0.976</u>
Turbidity	NTU	<u>3.6</u>	<u>4.1</u>	<u>4.7</u>		<u>4.5</u>
Temperature	°C	<u>19.7</u>	<u>19.9</u>	<u>19.7</u>		<u>19.6</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>		<u>250</u>
Water Level	FT BTOC	<u>12.67</u>	<u>12.71</u>	<u>12.73</u>		<u>12.73</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS: NONE

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE ☒ Peristaltic Pump Air-Lift Pump
Stainless Steel ☐ Submersible Pump Other _____
Teflon ☐ Hand Pump



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: Exide North CAMU Groundwater MonitoringProject No. : 130-2086-05

WEATHER CONDITIONS

Temperature 85° Weather SUNNY

SAMPLE INFORMATION

Sample Location PMW-20RSample No. PMW-20RSample Date 9-11-23Time 1405Sample By JTBSample Method Peristaltic PumpSample Type Grab

Begin Purge @

1340Water Level Before Purging: 19.12 FT BTOC TD: 28.26 FT BTOCWell Volume: 9.14 FT x 0.163 gal/FT = 1.5 gallons@ 250 mL/minVolume Water Removed Before Sampling: 1.25 gallonsWater Level Before Sampling: 19.43 FT BTOCWater Level After Sampling: 19.44 FT BTOCAppearance of Sample: clear, no odor

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1345</u>	<u>1350</u>	<u>1355</u>	<u>1400</u>	<u>1405</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>	<u>1.00</u>	<u>1.25</u>
pH	Standard	<u>6.91</u>	<u>6.81</u>	<u>6.74</u>	<u>6.71</u>	<u>6.73</u>
Spec. Cond.	mS/CM	<u>1.134</u>	<u>1.147</u>	<u>1.146</u>	<u>1.139</u>	<u>1.142</u>
Turbidity	NTU	<u>6.2</u>	<u>8.4</u>	<u>8.6</u>	<u>7.1</u>	<u>9.0</u>
Temperature	°C	<u>20.2</u>	<u>20.6</u>	<u>20.9</u>	<u>20.6</u>	<u>20.6</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>
Water Level	FT BTOC	<u>19.29</u>	<u>19.39</u>	<u>19.40</u>	<u>19.43</u>	<u>19.44</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS: NONE

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE
Stainless Steel
Teflon☒ Peristaltic Pump
☐ Submersible Pump
☐ Hand PumpAir-Lift Pump
Other _____

**GOLDER****GROUNDWATER SAMPLE COLLECTION FORM**Project Ref: Exide North CAMU Groundwater MonitoringProject No. : 130-2086-05**WEATHER CONDITIONS**

Temperature

85°

Weather

cloudy**SAMPLE INFORMATION**Sample Location LMW-21Sample No. LMW-21Sample Date 9-11-23Time 1325Sample By JTBSample Method Peristaltic PumpSample Type Grab

Begin Purge @

1305

Water Level Before Purging:

19.32

FT BTOC

TD:

28.07

FT BTOC

@

mL/min

250Well Volume: 8.75 FT x 0.163 gal/FT = 1.4 gallonsVolume Water Removed Before Sampling: 1.00 gallonsWater Level Before Sampling: 19.52 FT BTOCWater Level After Sampling: 19.53 FT BTOCAppearance of Sample: clear, no odor**FIELD MEASUREMENTS**

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1310</u>	<u>1315</u>	<u>1320</u>		<u>1325</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>		<u>1.00</u>
pH	Standard	<u>6.73</u>	<u>6.76</u>	<u>6.77</u>		<u>6.76</u>
Spec. Cond.	mS/CM	<u>1.434</u>	<u>1.396</u>	<u>1.417</u>		<u>1.413</u>
Turbidity	NTU	<u>8.6</u>	<u>8.1</u>	<u>7.9</u>		<u>8.0</u>
Temperature	°C	<u>20.3</u>	<u>20.0</u>	<u>20.1</u>		<u>20.2</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>		<u>250</u>
Water Level	FT BTOC	<u>19.47</u>	<u>19.51</u>	<u>19.52</u>		<u>19.53</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS: NONE

NA = Not applicable

SAMPLING METHODS:Bailer: PVC/PE
Stainless Steel
Teflon☒ Peristaltic Pump
☐ Submersible Pump
☐ Hand PumpAir-Lift Pump
Other _____



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: Exide North CAMU Groundwater MonitoringProject No. : 130-2086-05

WEATHER CONDITIONS

Temperature

84°

Weather

cloudy

SAMPLE INFORMATION

Sample Location LMW-5Sample No. LMW-5/DUP-01Sample Date 9-11-23Time 1245Sample By JTBSample Method Peristaltic PumpSample Type Grab

Begin Purge @

1225

Water Level Before Purging:

17.11

FT BTOC

TD: 25.25

FT BTOC

Well Volume: 8.14

FT

x 0.163 gal/FT = 1.3

gallons

@ 250 mL/min

Volume Water Removed Before Sampling:

1.0

gallons

Water Level Before Sampling:

17.32

FT BTOC

Water Level After Sampling:

17.32

FT BTOC

Appearance of Sample:

clear, no odor

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1230</u>	<u>1235</u>	<u>1240</u>		<u>1245</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>		<u>1.0</u>
pH	Standard	<u>7.09</u>	<u>7.04</u>	<u>7.03</u>		<u>7.03</u>
Spec. Cond.	mS/CM	<u>0.741</u>	<u>0.762</u>	<u>0.761</u>		<u>0.767</u>
Turbidity	NTU	<u>5.9</u>	<u>5.2</u>	<u>5.1</u>		<u>5.3</u>
Temperature	°C	<u>20.7</u>	<u>20.9</u>	<u>20.9</u>		<u>20.8</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>		<u>250</u>
Water Level	FT BTOC	<u>17.29</u>	<u>17.31</u>	<u>17.32</u>		<u>17.32</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	2 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	2 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS: DUP-01 collected

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE

Stainless Steel

Teflon

☒ Peristaltic Pump☐ Submersible Pump☐ Hand Pump☐ Air-Lift Pump

Other _____



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: Exide North CAMU Groundwater MonitoringProject No. : 130-2086-05

WEATHER CONDITIONS

Temperature

84°

Weather

cloudy

SAMPLE INFORMATION

Sample Location LMW-17Sample No. LMW-17Sample Date 9-11-23Time 1205Sample By JTBSample Method Peristaltic PumpSample Type Grab

Begin Purge @

Water Level Before Purging:

19.13

FT BTOC

TD:

25.45

FT BTOC

@

1145

mL/min

Well Volume: 6.32

FT

x 0.653 gal/FT = 1.0

gallons

Volume Water Removed Before Sampling: 1.0

gallons

Water Level Before Sampling:

19.32

FT BTOC

Water Level After Sampling:

19.33

FT BTOC

Appearance of Sample:

clear, no odor

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1150</u>	<u>1155</u>	<u>1200</u>		<u>1205</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>		<u>1.00</u>
pH	Standard	<u>6.76</u>	<u>6.81</u>	<u>6.82</u>		<u>6.81</u>
Spec. Cond.	mS/CM	<u>0.764</u>	<u>0.779</u>	<u>0.781</u>		<u>0.776</u>
Turbidity	NTU	<u>1.7</u>	<u>1.1</u>	<u>1.4</u>		<u>1.6</u>
Temperature	°C	<u>20.6</u>	<u>20.7</u>	<u>20.7</u>		<u>20.7</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>		<u>250</u>
Water Level	FT BTOC	<u>19.27</u>	<u>19.31</u>	<u>19.32</u>		<u>19.33</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>ND</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS:

NONE

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE

Stainless Steel

Teflon

☒ Peristaltic Pump☐ Submersible Pump☐ Hand Pump☐ Air-Lift Pump

Other _____

**GOLDER****GROUNDWATER SAMPLE COLLECTION FORM**Project Ref: Exide North CAMU Groundwater MonitoringProject No. : 130-2086-05**WEATHER CONDITIONS**Temperature 76° Weather cloudy**SAMPLE INFORMATION**

Sample Location LMW-8 Sample No. LMW-8
Sample Date 9-11-23 Time 1110 Sample By MTB
Sample Method Peristaltic Pump Sample Type Grab

Begin Purge @ 1045 Water Level Before Purging: 15.59 FT BTOC TD: 24.05 FT BTOC
@ 250 mL/min Well Volume: 8.46 FT x 0.163 gal/FT = 1.4 gallons
Volume Water Removed Before Sampling: 1.25 gallons
Water Level Before Sampling: 15.90 FT BTOC
Water Level After Sampling: 15.91 FT BTOC
Appearance of Sample: clear, no odor

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1050</u>	<u>1055</u>	<u>1100</u>	<u>1105</u>	<u>1110</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>	<u>1.0</u>	<u>1.25</u>
pH	Standard	<u>6.78</u>	<u>6.78</u>	<u>6.84</u>	<u>6.89</u>	<u>6.87</u>
Spec. Cond.	mS/CM	<u>1.347</u>	<u>1.216</u>	<u>0.967</u>	<u>0.959</u>	<u>0.962</u>
Turbidity	NTU	<u>5.6</u>	<u>4.7</u>	<u>4.3</u>	<u>4.6</u>	<u>4.6</u>
Temperature	°C	<u>19.6</u>	<u>19.9</u>	<u>19.4</u>	<u>19.5</u>	<u>19.5</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>
Water Level	FT BTOC	<u>15.79</u>	<u>15.86</u>	<u>15.89</u>	<u>15.90</u>	<u>15.91</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS: NONE

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE ☒ Peristaltic Pump Air-Lift Pump
Stainless Steel ☐ Submersible Pump Other _____
Teflon ☐ Hand Pump



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: Exide North CAMU Groundwater MonitoringProject No. : 130-2086-05

WEATHER CONDITIONS

Temperature

76°

Weather

cloudy

SAMPLE INFORMATION

Sample Location PMW-19RSample No. PMW-19RSample Date 9-11-23Time 1030Sample By JTBSample Method Peristaltic PumpSample Type Grab

Begin Purge @

Water Level Before Purging: 21.07

FT BTOC

TD: 22.70

FT BTOC

1010Well Volume: 1.63

FT

x 0.163 gal/FT = 0.25

gallons

@

250

mL/min

Volume Water Removed Before Sampling: 1.0

gallons

Water Level Before Sampling: 21.34

FT BTOC

Water Level After Sampling: 21.34

FT BTOC

Appearance of Sample: clear, no odor

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1015</u>	<u>1020</u>	<u>1025</u>		<u>1030</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>		<u>1.0</u>
pH	Standard	<u>6.76</u>	<u>6.79</u>	<u>6.79</u>		<u>6.78</u>
Spec. Cond.	S/CM	<u>1.329</u>	<u>1.369</u>	<u>1.361</u>		<u>1.367</u>
Turbidity	NTU	<u>12.36</u>	<u>12.59</u>	<u>12.67</u>		<u>12.61</u>
Temperature	°C	<u>20.1</u>	<u>20.6</u>	<u>20.3</u>		<u>20.2</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>		<u>250</u>
Water Level	FT BTOC	<u>21.34</u>	<u>21.39</u>	<u>21.36</u>		<u>21.36</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	NO YES	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS:

NDNE

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE

Stainless Steel

Teflon

☒ Peristaltic Pump☐ Submersible Pump☐ Hand Pump☐ Air-Lift Pump

Other _____



GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: Exide North CAMU Groundwater MonitoringProject No. : 130-2086-05

WEATHER CONDITIONS

Temperature

76°

Weather

cloudy

SAMPLE INFORMATION

Sample Location MW-45Sample No. MW-45/MS-01/MSD-01Sample Date 9-11-23Time 0955Sample By JTBSample Method Peristaltic PumpSample Type Grab

Begin Purge @

0930

Water Level Before Purging:

13.67

FT BTOC

TD:

22.55

FT BTOC

@ 250 mL/minWell Volume: 8.83

FT

x 0.163 gal/FT = 1.4

gallons

Volume Water Removed Before Sampling:

1.25

gallons

Water Level Before Sampling:

14.06

FT BTOC

Water Level After Sampling:

14.07

FT BTOC

Appearance of Sample:

clear no odor

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>0935</u>	<u>0940</u>	<u>0945</u>	<u>0950</u>	<u>0955</u>
Volume Discharge	gals	<u>1.25</u>	<u>1.50</u>	<u>1.75</u>	<u>1.0</u>	<u>1.25</u>
pH	Standard	<u>7.03</u>	<u>7.12</u>	<u>7.16</u>	<u>7.17</u>	<u>7.21</u>
Spec. Cond.	mS/CM	<u>0.961</u>	<u>0.629</u>	<u>0.617</u>	<u>0.612</u>	<u>0.616</u>
Turbidity	NTU	<u>4.6</u>	<u>3.2</u>	<u>3.7</u>	<u>3.6</u>	<u>3.6</u>
Temperature	°C	<u>19.6</u>	<u>19.2</u>	<u>19.3</u>	<u>19.2</u>	<u>19.3</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>
Water Level	FT BTOC	<u>13.94</u>	<u>13.99</u>	<u>14.02</u>	<u>14.06</u>	<u>14.07</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS: MS-01/MSD-01 collected.

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE
Stainless Steel
Teflon☒ Peristaltic Pump
☐ Submersible Pump
☐ Hand PumpAir-Lift Pump
Other _____



RECORD OF WATER LEVEL READINGS

Project Name: North CAMU GW Monitoring

[illegible]



GOLDER
MEMBER OF WSP

GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: North CAMU Groundwater Monitoring

Project No. : 2040906201

WEATHER CONDITIONS

Temperature 45° Weather RAIN

SAMPLE INFORMATION

Sample Location LMW-22 Sample No. LMW-22
Sample Date 11-30-23 Time 0855 Sample By JTB
Sample Method Peristaltic Pump Sample Type Grab

Begin Purge @ 0830 Water Level Before Purging: 15.76 FT BTOC TD: 23.15 FT BTOC
Well Volume: 7.39 FT x 0.163 gal/FT = 1.20 gallons
@ 250 mL/min Volume Water Removed Before Sampling: 1.25 gallons
Water Level Before Sampling: 16.02 FT BTOC
Water Level After Sampling: 16.04 FT BTOC
Appearance of Sample: clear, no odor

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>0835</u>	<u>0840</u>	<u>0845</u>	<u>0850</u>	<u>0855</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>	<u>1.00</u>	<u>1.25</u>
pH	Standard	<u>6.64</u>	<u>6.69</u>	<u>6.79</u>	<u>6.82</u>	<u>6.83</u>
Spec. Cond.	mS/CM	<u>0.136</u>	<u>0.659</u>	<u>0.679</u>	<u>0.671</u>	<u>0.672</u>
Turbidity	NTU	<u>3.9</u>	<u>4.6</u>	<u>4.3</u>	<u>4.2</u>	<u>4.3</u>
Temperature	°C	<u>20.2</u>	<u>20.7</u>	<u>20.3</u>	<u>20.4</u>	<u>20.5</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>
Water Level	FT BTOC	<u>15.93</u>	<u>15.97</u>	<u>15.97</u>	<u>16.02</u>	<u>16.04</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS: _____

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE

Stainless Steel
Teflon

Peristaltic Pump

Submersible Pump
Hand Pump

Air-Lift Pump

Other _____



GOLDER
MEMBER OF WSP

GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: North CAMU Groundwater Monitoring

Project No. : 2040906201

WEATHER CONDITIONS

Temperature 45° Weather RAIN

SAMPLE INFORMATION

Sample Location LMW-9R

Sample No. LMW-9R

Sample Date 11-30-23

Time 0815

Sample By JB

Sample Method Peristaltic Pump

Sample Type Grab

Begin Purge @ 0750 Water Level Before Purging: 15.54 FT BTOC TD: 32.92 FT BTOC
 @ 250 mL/min Well Volume: 17.38 FT x 0.163 gal/FT = 2.85 gallons
 Volume Water Removed Before Sampling: 1.25 gallons
 Water Level Before Sampling: 15.93 FT BTOC
 Water Level After Sampling: 15.94 FT BTOC
 Appearance of Sample: clear, no odor

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>0755</u>	<u>0800</u>	<u>0805</u>	<u>0810</u>	<u>0815</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>	<u>1.00</u>	<u>1.25</u>
pH	Standard	<u>6.42</u>	<u>6.57</u>	<u>6.63</u>	<u>6.61</u>	<u>6.60</u>
Spec. Cond.	mS/CM	<u>2.111</u>	<u>2.134</u>	<u>2.139</u>	<u>2.137</u>	<u>2.131</u>
Turbidity	NTU	<u>3.6</u>	<u>4.2</u>	<u>3.9</u>	<u>3.6</u>	<u>3.7</u>
Temperature	°C	<u>20.3</u>	<u>20.7</u>	<u>20.8</u>	<u>20.9</u>	<u>20.9</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>
Water Level	FT BTOC	<u>15.74</u>	<u>15.86</u>	<u>15.89</u>	<u>15.93</u>	<u>15.94</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>ND</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS: _____

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE

Stainless Steel
Teflon

Peristaltic Pump

Submersible Pump
Hand Pump

Air-Lift Pump

Other _____



GOLDER
MEMBER OF WSP

GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: North CAMU Groundwater Monitoring

Project No. : 2040906201

WEATHER CONDITIONS

Temperature 65° Weather SUNNY

SAMPLE INFORMATION

Sample Location MW-47 Sample No. MW-47
 Sample Date 11-29-23 Time 1520 Sample By JTB
 Sample Method Peristaltic Pump Sample Type Grab
 Begin Purge @ 1455 Water Level Before Purging: 7.56 FT BTOC TD: 17.95 FT BTOC
 @ 250 mL/min Well Volume: 10.39 FT x 0.163 gal/FT = 1.70 gallons
 Volume Water Removed Before Sampling: 1.25 gallons
 Water Level Before Sampling: 8.11 FT BTOC
 Water Level After Sampling: 8.13 FT BTOC
 Appearance of Sample: clear, no odor

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1500</u>	<u>1505</u>	<u>1510</u>	<u>1515</u>	<u>1520</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>	<u>1.00</u>	<u>1.25</u>
pH	Standard	<u>6.56</u>	<u>6.59</u>	<u>6.71</u>	<u>6.77</u>	<u>6.78</u>
Spec. Cond.	mS/CM	<u>1.361</u>	<u>1.391</u>	<u>1.396</u>	<u>1.391</u>	<u>1.392</u>
Turbidity	NTU	<u>6.7</u>	<u>7.4</u>	<u>7.7</u>	<u>7.3</u>	<u>7.1</u>
Temperature	°C	<u>20.7</u>	<u>20.2</u>	<u>20.0</u>	<u>20.3</u>	<u>20.4</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>
Water Level	FT BTOC	<u>7.96</u>	<u>8.02</u>	<u>8.06</u>	<u>8.11</u>	<u>8.13</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS: _____

NA = Not applicable

SAMPLING METHODS:

Bailer: ☐ PVC/PE
☐ Stainless Steel
☐ Teflon

☒ Peristaltic Pump
☐ Submersible Pump
☐ Hand Pump

☐ Air-Lift Pump
☐ Other _____



GOLDER
MEMBER OF WSP

GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: North CAMU Groundwater Monitoring

Project No.: 2040906201

WEATHER CONDITIONS

Temperature

65°

Weather

SUNNY

SAMPLE INFORMATION

Sample Location MW-41

Sample No. MW-41

Sample Date 11-29-23

Time 1430

Sample By JTB

Sample Method Peristaltic Pump

Sample Type Grab

Begin Purge @

Water Level Before Purging:

9.79

FT BTOC

TD:

19.15

FT BTOC

1410

Well Volume:

9.36

FT

x

0.163

gal/FT

=

1.50

gallons

@

250

mL/min

Volume Water Removed Before Sampling:

1.00

gallons

Water Level Before Sampling:

10.11

FT BTOC

Water Level After Sampling:

10.14

FT BTOC

Appearance of Sample:

clear, no odor

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1415</u>	<u>1420</u>	<u>1425</u>		<u>1430</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>		<u>1.00</u>
pH	Standard	<u>6.74</u>	<u>6.77</u>	<u>6.71</u>		<u>6.72</u>
Spec. Cond.	mS/CM	<u>0.796</u>	<u>0.812</u>	<u>0.816</u>		<u>0.819</u>
Turbidity	NTU	<u>2.6</u>	<u>3.1</u>	<u>2.7</u>		<u>2.8</u>
Temperature	°C	<u>19.4</u>	<u>19.3</u>	<u>19.2</u>		<u>19.4</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>		<u>250</u>
Water Level	FT BTOC	<u>9.96</u>	<u>10.06</u>	<u>10.11</u>		<u>10.14</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>no</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS:

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE

Stainless Steel

Teflon

☒ Peristaltic Pump

☐ Submersible Pump

☐ Hand Pump

☐ Air-Lift Pump

Other



GOLDER
MEMBER OF WSP

GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: North CAMU Groundwater Monitoring

Project No. : 2040906201

WEATHER CONDITIONS

Temperature 65° Weather SUNNY

SAMPLE INFORMATION

Sample Location PMW-20R

Sample No. PMW-20R

Sample Date 11-29-23

Time 1345

Sample By JTB

Sample Method Peristaltic Pump

Sample Type Grab

Begin Purge @

Water Level Before Purging: 16.58

FT BTOC

TD: 28.25

FT BTOC

1320

Well Volume: 11.67 FT x 0.163 gal/FT = 1.9 gallons

@ 250

mL/min

Volume Water Removed Before Sampling: 1.25 gallons

Water Level Before Sampling: 16.96 FT BTOC

Water Level After Sampling: 16.97 FT BTOC

Appearance of Sample: clear no odor

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1325</u>	<u>1330</u>	<u>1335</u>	<u>1340</u>	<u>1345</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>	<u>1.00</u>	<u>1.25</u>
pH	Standard	<u>6.86</u>	<u>6.81</u>	<u>6.71</u>	<u>6.73</u>	<u>6.74</u>
Spec. Cond.	mS/CM	<u>1.417</u>	<u>1.216</u>	<u>1.107</u>	<u>1.112</u>	<u>1.116</u>
Turbidity	NTU	<u>8.6</u>	<u>9.1</u>	<u>9.2</u>	<u>9.3</u>	<u>9.4</u>
Temperature	°C	<u>19.7</u>	<u>19.3</u>	<u>19.6</u>	<u>19.7</u>	<u>19.6</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>
Water Level	FT BTOC	<u>16.81</u>	<u>16.86</u>	<u>16.94</u>	<u>16.96</u>	<u>16.97</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS:

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE
Stainless Steel
Teflon

☒ Peristaltic Pump
☐ Submersible Pump
☐ Hand Pump

☐ Air-Lift Pump
Other _____



GOLDER
MEMBER OF WSP

GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: North CAMU Groundwater Monitoring

Project No. : 2040906201

WEATHER CONDITIONS

Temperature 65° Weather SUNNY

SAMPLE INFORMATION

Sample Location LMW-21 Sample No. LMW-21
Sample Date 11-29-23 Time 1255 Sample By JTB
Sample Method Peristaltic Pump Sample Type Grab

Begin Purge @ 1235 Water Level Before Purging: 16.82 FT BTOC TD: 28.07 FT BTOC
Well Volume: 11.25 FT x 0.163 gal/FT = 1.80 gallons
@ 250 mL/min Volume Water Removed Before Sampling: 1.00 gallons
Water Level Before Sampling: 17.26 FT BTOC
Water Level After Sampling: 17.28 FT BTOC
Appearance of Sample: clear, no odor

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1240</u>	<u>1245</u>	<u>1250</u>	<u>-</u>	<u>1255</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>		<u>1.00</u>
pH	Standard	<u>6.68</u>	<u>6.71</u>	<u>6.72</u>		<u>6.71</u>
Spec. Cond.	mS/CM	<u>1.346</u>	<u>1.317</u>	<u>1.326</u>		<u>1.321</u>
Turbidity	NTU	<u>6.3</u>	<u>6.9</u>	<u>6.1</u>		<u>6.2</u>
Temperature	°C	<u>20.1</u>	<u>20.6</u>	<u>20.7</u>		<u>20.8</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>		<u>250</u>
Water Level	FT BTOC	<u>17.17</u>	<u>17.22</u>	<u>17.26</u>		<u>17.28</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS:

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE
Stainless Steel
Teflon

☒ Peristaltic Pump
☐ Submersible Pump
☐ Hand Pump
☐ Air-Lift Pump
Other _____



GOLDER
MEMBER OF WSP

GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: North CAMU Groundwater Monitoring

Project No. : 2040906201

WEATHER CONDITIONS

Temperature 55°

Weather SUNNY

SAMPLE INFORMATION

Sample Location LMW-5

Sample No. LMW-5/DUP-01

Sample Date 11-29-23

Time 1215

Sample By JTB

Sample Method Peristaltic Pump

Sample Type Grab

Begin Purge @

Water Level Before Purging: 14.77 FT BTOC TD: 25.25 FT BTOC

@ 1155

Well Volume: 10.48 FT x 0.163 gal/FT = 1.70 gallons

@ 250 mL/min

Volume Water Removed Before Sampling: 1.00 gallons

Water Level Before Sampling: 14.98 FT BTOC

Water Level After Sampling: 14.98 FT BTOC

Appearance of Sample: clear, no odor

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1200</u>	<u>1205</u>	<u>1210</u>	<u>—</u>	<u>1215</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>		<u>1.00</u>
pH	Standard	<u>7.02</u>	<u>7.06</u>	<u>7.07</u>		<u>7.07</u>
Spec. Cond.	mS/CM	<u>0.681</u>	<u>0.693</u>	<u>0.691</u>		<u>0.690</u>
Turbidity	NTU	<u>4.3</u>	<u>3.7</u>	<u>3.9</u>		<u>3.9</u>
Temperature	°C	<u>20.7</u>	<u>20.6</u>	<u>20.4</u>		<u>20.5</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>		<u>250</u>
Water Level	FT BTOC	<u>14.93</u>	<u>14.96</u>	<u>14.99</u>		<u>14.98</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	2 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	2 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS: DUP-01 collected

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE

Stainless Steel

Teflon

Peristaltic Pump

Submersible Pump

Hand Pump

Air-Lift Pump

Other _____



GOLDER
MEMBER OF WSP

GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: North CAMU Groundwater Monitoring

Project No. : 2040906201

WEATHER CONDITIONS

Temperature 55°

Weather SUNNY

SAMPLE INFORMATION

Sample Location LMW-17

Sample No. LMW-17

Sample Date 11-29-23

Time 1140

Sample By JTB

Sample Method Peristaltic Pump

Sample Type Grab

Begin Purge @

Water Level Before Purging: 17.59

FT BTOC

TD: 25.45

FT BTOC

1120

Well Volume: 7.86 FT x 0.653 gal/FT = 1.30 gallons

@ 250 mL/min

Volume Water Removed Before Sampling: 1.00 gallons

Water Level Before Sampling: 17.91 FT BTOC

Water Level After Sampling: 17.92 FT BTOC

Appearance of Sample: clear, no odor

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1125</u>	<u>1130</u>	<u>1135</u>	<u>-</u>	<u>1140</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>		<u>1.00</u>
pH	Standard	<u>6.86</u>	<u>6.89</u>	<u>6.84</u>		<u>6.86</u>
Spec. Cond.	mS/CM	<u>0.717</u>	<u>0.726</u>	<u>0.721</u>		<u>0.723</u>
Turbidity	NTU	<u>2.6</u>	<u>2.1</u>	<u>2.3</u>		<u>2.6</u>
Temperature	°C	<u>19.6</u>	<u>19.4</u>	<u>19.8</u>		<u>19.7</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>		<u>250</u>
Water Level	FT BTOC	<u>17.86</u>	<u>17.89</u>	<u>17.91</u>		<u>17.92</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	<u>HNO₃</u>
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS:

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE

Stainless Steel

Teflon

Peristaltic Pump

Submersible Pump

Hand Pump

Air-Lift Pump

Other



GOLDER
MEMBER OF WSP

GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: North CAMU Groundwater Monitoring

Project No. : 2040906201

WEATHER CONDITIONS

Temperature 50° Weather SUNNY

SAMPLE INFORMATION

Sample Location LMW-8 Sample No. LMW-8
Sample Date 11-21-23 Time 1105 Sample By JTB
Sample Method Peristaltic Pump Sample Type Grab

Begin Purge @ 1040 Water Level Before Purging: 14.83 FT BTOC TD: 24.05 FT BTOC
Well Volume: 9.22 FT x 0.163 gal/FT = 1.5 gallons
@ 250 mL/min Volume Water Removed Before Sampling: 1.25 gallons
Water Level Before Sampling: _____ FT BTOC
Water Level After Sampling: _____ FT BTOC
Appearance of Sample: _____

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1045</u>	<u>1050</u>	<u>1055</u>	<u>1100</u>	<u>1105</u>
Volume Discharge	gals	<u>1.25</u>	<u>1.50</u>	<u>1.75</u>	<u>1.00</u>	<u>1.25</u>
pH	Standard	<u>6.72</u>	<u>6.74</u>	<u>6.88</u>	<u>6.86</u>	<u>6.85</u>
Spec. Cond.	mS/CM	<u>1.212</u>	<u>1.174</u>	<u>0.961</u>	<u>0.967</u>	<u>0.971</u>
Turbidity	NTU	<u>3.6</u>	<u>4.2</u>	<u>4.4</u>	<u>4.1</u>	<u>4.2</u>
Temperature	°C	<u>20.7</u>	<u>20.6</u>	<u>20.5</u>	<u>20.5</u>	<u>20.6</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>
Water Level	FT BTOC	<u>15.12</u>	<u>15.17</u>	<u>15.19</u>	<u>15.20</u>	<u>15.21</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS: _____

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE
Stainless Steel
Teflon

☒ Peristaltic Pump
☐ Submersible Pump
☐ Hand Pump

☐ Air-Lift Pump
Other _____



GOLDER
MEMBER OF WSP

GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: North CAMU Groundwater Monitoring

Project No. : 2040906201

WEATHER CONDITIONS

Temperature 50°

Weather SUNNY

SAMPLE INFORMATION

Sample Location PMW-19R

Sample No. PMW-19R

Sample Date 11-29-23

Time 1020

Sample By JTB

Sample Method Peristaltic Pump

Sample Type Grab

Begin Purge @

Water Level Before Purging: 20.66

FT BTOC

TD: 22.70

FT BTOC

1000

Well Volume: 3.04

FT x 0.163 gal/FT = 0.35 gallons

@ 250 mL/min

Volume Water Removed Before Sampling: 1.00 gallons

Water Level Before Sampling: 20.91 FT BTOC

Water Level After Sampling: 20.92 FT BTOC

Appearance of Sample: clear, no odor

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>1005</u>	<u>1010</u>	<u>1015</u>	<u>—</u>	<u>1020</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>		<u>1.00</u>
pH	Standard	<u>6.71</u>	<u>6.75</u>	<u>6.76</u>		<u>6.74</u>
Spec. Cond.	S/CM	<u>1.342</u>	<u>1.331</u>	<u>1.336</u>		<u>1.141</u>
Turbidity	NTU	<u>9.62</u>	<u>11.71</u>	<u>11.74</u>		<u>11.71</u>
Temperature	°C	<u>20.7</u>	<u>20.9</u>	<u>20.9</u>		<u>20.8</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>		<u>250</u>
Water Level	FT BTOC	<u>20.86</u>	<u>20.89</u>	<u>20.91</u>		<u>20.92</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>YES</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS:

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE
Stainless Steel
Teflon

☒ Peristaltic Pump
☐ Submersible Pump
☐ Hand Pump

☐ Air-Lift Pump
Other _____



GOLDER
MEMBER OF WSP

GROUNDWATER SAMPLE COLLECTION FORM

Project Ref: North CAMU Groundwater Monitoring

Project No. : 2040906201

WEATHER CONDITIONS

Temperature

50°

Weather

SUNNY

SAMPLE INFORMATION

Sample Location MW-45

Sample No. MW-45/MS-01/MSD-01

Sample Date 11-29-23

Time 0945

Sample By JTB

Sample Method Peristaltic Pump

Sample Type Grab

Begin Purge @
0920

Water Level Before Purging: 13.29 FT BTOC TD: 22.55 FT BTOC

Well Volume: 9.26 FT x 0.163 gal/FT = 1.5 gallons

@ 250 mL/min

Volume Water Removed Before Sampling: 1.25 gallons

Water Level Before Sampling: 13.61 FT BTOC

Water Level After Sampling: 13.64 FT BTOC

Appearance of Sample: clear, no odor

FIELD MEASUREMENTS

Parameter	Units	Measurement	Measurement	Measurement	Measurement	Sample
Time	hhmm	<u>0925</u>	<u>0930</u>	<u>0935</u>	<u>0940</u>	<u>0945</u>
Volume Discharge	gals	<u>.25</u>	<u>.50</u>	<u>.75</u>	<u>1.00</u>	<u>1.25</u>
pH	Standard	<u>7.06</u>	<u>7.09</u>	<u>7.16</u>	<u>7.17</u>	<u>7.17</u>
Spec. Cond.	mS/CM	<u>0.867</u>	<u>0.809</u>	<u>0.674</u>	<u>0.679</u>	<u>0.671</u>
Turbidity	NTU	<u>3.6</u>	<u>3.1</u>	<u>2.6</u>	<u>2.9</u>	<u>3.0</u>
Temperature	°C	<u>19.9</u>	<u>19.4</u>	<u>19.6</u>	<u>19.4</u>	<u>19.3</u>
Pump Rate	mL/min	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>
Water Level	FT BTOC	<u>13.47</u>	<u>13.56</u>	<u>13.59</u>	<u>13.61</u>	<u>13.64</u>

LABORATORY CONTAINERS

Sub-Sample	Analysis Requested	Type and Size of Sample Container	Filtered (Yes or No)	Type of Preservative
1	Total Metals	1 x 120 mL Poly	<u>NO</u>	HNO ₃
2	Dissolved Metals	1 x 120 mL Poly	Yes (0.45 µm)	HNO ₃
3				
4				
5				
6				
7				
8				

REMARKS: MS-01/MSD-01 collected.

NA = Not applicable

SAMPLING METHODS:

Bailer: PVC/PE

Stainless Steel

Teflon

☒ Peristaltic Pump

☐ Submersible Pump

☐ Hand Pump

☐ Air-Lift Pump

☐ Other _____

APPENDIX C

**Groundwater Laboratory Analytical
Results**



10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887

September 21, 2023

William Wedge
WSP Golder
701 Emerson Road Suite 250
Creve Coeur, MO 63141

Work Order: **HS23090922**

Laboratory Results for: **Frisco CDC GW North CAMU GW Qty**

Dear William Wedge,

ALS Environmental received 12 sample(s) on Sep 14, 2023 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: JUMOKE.LAWAL

Tyler Monroe

Client: WSP Golder
Project: Frisco CDC GW North CAMU GW Qty
WorkOrder: HS23090922

**TRRP Laboratory Data
Package Cover Page**

This data package consists of all or some of the following as applicable:

This signature page, the laboratory review checklist, and the following reportable data:

- R1 Field chain-of-custody documentation;
- R2 Sample identification cross-reference;
- R3 Test reports (analytical data sheets) for each environmental sample that includes:
 - a) Items consistent with NELAC Chapter 5,
 - b) dilution factors,
 - c) preparation methods,
 - d) cleanup methods, and
 - e) if required for the project, tentatively identified compounds (TICs).
- R4 Surrogate recovery data including:
 - a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- R5 Test reports/summary forms for blank samples;
- R6 Test reports/summary forms for laboratory control samples (LCSs) including:
 - a) LCS spiking amounts,
 - b) Calculated %R for each analyte, and
 - c) The laboratory's LCS QC limits.
- R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a) Samples associated with the MS/MSD clearly identified,
 - b) MS/MSD spiking amounts,
 - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d) Calculated %Rs and relative percent differences (RPDs), and
 - e) The laboratory's MS/MSD QC limits.
- R8 Laboratory analytical duplicate (if applicable) recovery and precision:
 - a) the amount of analyte measured in the duplicate,
 - b) the calculated RPD, and
 - c) the laboratory's QC limits for analytical duplicates.
- R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 Other problems or anomalies.
The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Client: WSP Golder**Project:** Frisco CDC GW North CAMU GW Qty**WorkOrder:** HS23090922**TRRP Laboratory Data
Package Cover Page**

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory have been identified by the laboratory in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: ☒ [NA] This laboratory meets an exception under 30 TAC §25.6 and was last inspected by ☐ TCEQ or ☐ _____ on (enter date of last inspection). Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.



Tyler Monroe

Laboratory Review Checklist: Reportable Data

Laboratory Name: ALS Laboratory Group			LRC Date: 09/21/2023				
Project Name: Frisco CDC GW North CAMU GW Qty			Laboratory Job Number: HS23090922				
Reviewer Name: Tyler Monroe			Prep Batch Number(s): 200631,200661				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW-846 Method 5035?			X		
		If required for the project, TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Were all necessary corrective actions performed for the reported data?	X				
		Was applicable and available technology used to lower the SDL and minimize the matrix interference affects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Program for the analytes, matrices and methods associated with this laboratory data package?	X				

Laboratory Review Checklist: Supporting Data

Laboratory Name: ALS Laboratory Group			LRC Date: 09/21/2023				
Project Name: Frisco CDC GW North CAMU GW Qty			Laboratory Job Number: HS23090922				
Reviewer Name: Tyler Monroe			Prep Batch Number(s): 200631,200661				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB)					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning:					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS):					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs):					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results:					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSS?	X				
S11	OI	Proficiency test reports:					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs):					
		Are laboratory SOPs current and on file for each method performed?	X				

Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

O = Organic Analyses; I = Inorganic Analyses (and general chemistry, when applicable);

NA = Not Applicable;

NR = Not Reviewed;

R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports	
Laboratory Name: ALS Laboratory Group	LRC Date: 09/21/2023
Project Name: Frisco CDC GW North CAMU GW Qty	Laboratory Job Number: HS23090922
Reviewer Name: Tyler Monroe	Prep Batch Number(s): 200631,200661
ER#⁵	Description
	No Exceptions
Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. O = Organic Analyses; I = Inorganic Analyses (and general chemistry, when applicable); NA = Not Applicable; NR = Not Reviewed; R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).	

Client: WSP Golder
Project: Frisco CDC GW North CAMU GW Qty
Work Order: HS23090922

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23090922-01	MW-45	Groundwater		11-Sep-2023 09:55	14-Sep-2023 10:00	☐
HS23090922-02	PMW-19R	Groundwater		11-Sep-2023 10:30	14-Sep-2023 10:00	☐
HS23090922-03	LMW-8	Groundwater		11-Sep-2023 11:10	14-Sep-2023 10:00	☐
HS23090922-04	LMW-17	Groundwater		11-Sep-2023 12:05	14-Sep-2023 10:00	☐
HS23090922-05	LMW-5	Groundwater		11-Sep-2023 12:45	14-Sep-2023 10:00	☐
HS23090922-06	LMW-21	Groundwater		11-Sep-2023 13:25	14-Sep-2023 10:00	☐
HS23090922-07	PMW-20R	Groundwater		11-Sep-2023 14:05	14-Sep-2023 10:00	☐
HS23090922-08	MW-41	Groundwater		11-Sep-2023 14:45	14-Sep-2023 10:00	☐
HS23090922-09	MW-47	Groundwater		11-Sep-2023 15:30	14-Sep-2023 10:00	☐
HS23090922-10	LMW-9R	Groundwater		12-Sep-2023 08:45	14-Sep-2023 10:00	☐
HS23090922-11	LMW-22	Groundwater		12-Sep-2023 09:30	14-Sep-2023 10:00	☐
HS23090922-12	DUP-01	Groundwater		11-Sep-2023 12:45	14-Sep-2023 10:00	☐

Client: WSP Golder
Project: Frisco CDC GW North CAMU GW Qty
Sample ID: MW-45
Collection Date: 11-Sep-2023 09:55

ANALYTICAL REPORT

WorkOrder:HS23090922
Lab ID:HS23090922-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A			Prep:SW3010A / 19-Sep-2023		Analyst: MSC
Arsenic	U		0.000400	0.00200	mg/L	1	20-Sep-2023 00:35
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 00:35
Lead	U		0.000600	0.00200	mg/L	1	20-Sep-2023 00:35
Selenium	0.00171	J	0.00110	0.00200	mg/L	1	20-Sep-2023 00:35
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)			Prep:SW3010A / 20-Sep-2023		Analyst: MSC
Arsenic	U		0.000400	0.00200	mg/L	1	20-Sep-2023 20:10
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 20:10
Lead	U		0.000600	0.00200	mg/L	1	20-Sep-2023 20:10
Selenium	0.00152	J	0.00110	0.00200	mg/L	1	20-Sep-2023 20:10

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: WSP Golder
Project: Frisco CDC GW North CAMU GW Qty
Sample ID: PMW-19R
Collection Date: 11-Sep-2023 10:30

ANALYTICAL REPORT

WorkOrder:HS23090922
Lab ID:HS23090922-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A			Prep:SW3010A / 19-Sep-2023		Analyst: MSC
Arsenic	U		0.000400	0.00200	mg/L	1	20-Sep-2023 00:49
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 00:49
Lead	U		0.000600	0.00200	mg/L	1	20-Sep-2023 00:49
Selenium	U		0.00110	0.00200	mg/L	1	20-Sep-2023 00:49
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)			Prep:SW3010A / 20-Sep-2023		Analyst: MSC
Arsenic	0.000454	J	0.000400	0.00200	mg/L	1	20-Sep-2023 20:43
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 20:43
Lead	U		0.000600	0.00200	mg/L	1	20-Sep-2023 20:43
Selenium	U		0.00110	0.00200	mg/L	1	20-Sep-2023 20:43

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: WSP Golder
Project: Frisco CDC GW North CAMU GW Qty
Sample ID: LMW-8
Collection Date: 11-Sep-2023 11:10

ANALYTICAL REPORT

WorkOrder:HS23090922
Lab ID:HS23090922-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 19-Sep-2023		Analyst: MSC	
Arsenic	0.000829	J	0.000400	0.00200	mg/L	1	20-Sep-2023 00:50
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 00:50
Lead	U		0.000600	0.00200	mg/L	1	20-Sep-2023 00:50
Selenium	U		0.00110	0.00200	mg/L	1	20-Sep-2023 00:50
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 20-Sep-2023		Analyst: MSC	
Arsenic	0.000658	J	0.000400	0.00200	mg/L	1	20-Sep-2023 20:45
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 20:45
Lead	U		0.000600	0.00200	mg/L	1	20-Sep-2023 20:45
Selenium	0.00214		0.00110	0.00200	mg/L	1	20-Sep-2023 20:45

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: WSP Golder
Project: Frisco CDC GW North CAMU GW Qty
Sample ID: LMW-17
Collection Date: 11-Sep-2023 12:05

ANALYTICAL REPORT

WorkOrder:HS23090922
Lab ID:HS23090922-04
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 19-Sep-2023		Analyst: MSC	
Arsenic	0.000405	J	0.000400	0.00200	mg/L	1	20-Sep-2023 00:52
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 00:52
Lead	U		0.000600	0.00200	mg/L	1	20-Sep-2023 00:52
Selenium	U		0.00110	0.00200	mg/L	1	20-Sep-2023 00:52
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 20-Sep-2023		Analyst: MSC	
Arsenic	0.000595	J	0.000400	0.00200	mg/L	1	20-Sep-2023 20:47
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 20:47
Lead	U		0.000600	0.00200	mg/L	1	20-Sep-2023 20:47
Selenium	U		0.00110	0.00200	mg/L	1	20-Sep-2023 20:47

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: WSP Golder
Project: Frisco CDC GW North CAMU GW Qty
Sample ID: LMW-5
Collection Date: 11-Sep-2023 12:45

ANALYTICAL REPORT

WorkOrder:HS23090922
Lab ID:HS23090922-05
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A			Prep:SW3010A / 19-Sep-2023		Analyst: MSC
Arsenic	U		0.000400	0.00200	mg/L	1	20-Sep-2023 00:54
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 00:54
Lead	0.00130	J	0.000600	0.00200	mg/L	1	20-Sep-2023 00:54
Selenium	U		0.00110	0.00200	mg/L	1	20-Sep-2023 00:54
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)			Prep:SW3010A / 20-Sep-2023		Analyst: MSC
Arsenic	0.000466	J	0.000400	0.00200	mg/L	1	20-Sep-2023 20:49
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 20:49
Lead	U		0.000600	0.00200	mg/L	1	20-Sep-2023 20:49
Selenium	U		0.00110	0.00200	mg/L	1	20-Sep-2023 20:49

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: WSP Golder
Project: Frisco CDC GW North CAMU GW Qty
Sample ID: LMW-21
Collection Date: 11-Sep-2023 13:25

ANALYTICAL REPORT

WorkOrder:HS23090922
Lab ID:HS23090922-06
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A			Prep:SW3010A / 19-Sep-2023		Analyst: MSC
Arsenic	0.000707	J	0.000400	0.00200	mg/L	1	20-Sep-2023 00:56
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 00:56
Lead	0.00303		0.000600	0.00200	mg/L	1	20-Sep-2023 00:56
Selenium	0.00619		0.00110	0.00200	mg/L	1	20-Sep-2023 00:56
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)			Prep:SW3010A / 20-Sep-2023		Analyst: MSC
Arsenic	0.000917	J	0.000400	0.00200	mg/L	1	20-Sep-2023 20:51
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 20:51
Lead	0.00827		0.000600	0.00200	mg/L	1	20-Sep-2023 20:51
Selenium	0.00584		0.00110	0.00200	mg/L	1	20-Sep-2023 20:51

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: WSP Golder
Project: Frisco CDC GW North CAMU GW Qty
Sample ID: PMW-20R
Collection Date: 11-Sep-2023 14:05

ANALYTICAL REPORT

WorkOrder:HS23090922
Lab ID:HS23090922-07
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A			Prep:SW3010A / 19-Sep-2023		Analyst: MSC
Arsenic	U		0.000400	0.00200	mg/L	1	20-Sep-2023 00:58
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 00:58
Lead	U		0.000600	0.00200	mg/L	1	20-Sep-2023 00:58
Selenium	0.00269		0.00110	0.00200	mg/L	1	20-Sep-2023 00:58
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)			Prep:SW3010A / 20-Sep-2023		Analyst: MSC
Arsenic	U		0.000400	0.00200	mg/L	1	20-Sep-2023 20:59
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 20:59
Lead	U		0.000600	0.00200	mg/L	1	20-Sep-2023 20:59
Selenium	0.00210		0.00110	0.00200	mg/L	1	20-Sep-2023 20:59

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: WSP Golder
Project: Frisco CDC GW North CAMU GW Qty
Sample ID: MW-41
Collection Date: 11-Sep-2023 14:45

ANALYTICAL REPORT

WorkOrder:HS23090922
Lab ID:HS23090922-08
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 19-Sep-2023		Analyst: MSC	
Arsenic	0.000882	J	0.000400	0.00200	mg/L	1	20-Sep-2023 01:00
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 01:00
Lead	U		0.000600	0.00200	mg/L	1	20-Sep-2023 01:00
Selenium	0.00216		0.00110	0.00200	mg/L	1	20-Sep-2023 01:00
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 20-Sep-2023		Analyst: MSC	
Arsenic	0.000431	J	0.000400	0.00200	mg/L	1	20-Sep-2023 21:01
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 21:01
Lead	U		0.000600	0.00200	mg/L	1	20-Sep-2023 21:01
Selenium	0.00228		0.00110	0.00200	mg/L	1	20-Sep-2023 21:01

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: WSP Golder
Project: Frisco CDC GW North CAMU GW Qty
Sample ID: MW-47
Collection Date: 11-Sep-2023 15:30

ANALYTICAL REPORT

WorkOrder:HS23090922
Lab ID:HS23090922-09
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 19-Sep-2023		Analyst: MSC	
Arsenic	0.00637		0.000400	0.00200	mg/L	1	20-Sep-2023 01:02
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 01:02
Lead	U		0.000600	0.00200	mg/L	1	20-Sep-2023 01:02
Selenium	U		0.00110	0.00200	mg/L	1	20-Sep-2023 01:02
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 20-Sep-2023		Analyst: MSC	
Arsenic	0.00778		0.000400	0.00200	mg/L	1	20-Sep-2023 21:03
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 21:03
Lead	U		0.000600	0.00200	mg/L	1	20-Sep-2023 21:03
Selenium	U		0.00110	0.00200	mg/L	1	20-Sep-2023 21:03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: WSP Golder
Project: Frisco CDC GW North CAMU GW Qty
Sample ID: LMW-9R
Collection Date: 12-Sep-2023 08:45

ANALYTICAL REPORT

WorkOrder:HS23090922
Lab ID:HS23090922-10
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 19-Sep-2023		Analyst: MSC	
Arsenic	0.00238		0.000400	0.00200	mg/L	1	20-Sep-2023 01:04
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 01:04
Lead	U		0.000600	0.00200	mg/L	1	20-Sep-2023 01:04
Selenium	0.00276		0.00110	0.00200	mg/L	1	20-Sep-2023 01:04
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 20-Sep-2023		Analyst: MSC	
Arsenic	0.00282		0.000400	0.00200	mg/L	1	20-Sep-2023 21:05
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 21:05
Lead	U		0.000600	0.00200	mg/L	1	20-Sep-2023 21:05
Selenium	0.00373		0.00110	0.00200	mg/L	1	20-Sep-2023 21:05

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: WSP Golder
Project: Frisco CDC GW North CAMU GW Qty
Sample ID: LMW-22
Collection Date: 12-Sep-2023 09:30

ANALYTICAL REPORT

WorkOrder:HS23090922
Lab ID:HS23090922-11
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 19-Sep-2023		Analyst: MSC	
Arsenic	0.00777		0.000400	0.00200	mg/L	1	20-Sep-2023 01:06
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 01:06
Lead	U		0.000600	0.00200	mg/L	1	20-Sep-2023 01:06
Selenium	U		0.00110	0.00200	mg/L	1	20-Sep-2023 01:06
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 20-Sep-2023		Analyst: MSC	
Arsenic	0.00978		0.000400	0.00200	mg/L	1	20-Sep-2023 21:07
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 21:07
Lead	0.000916	J	0.000600	0.00200	mg/L	1	20-Sep-2023 21:07
Selenium	U		0.00110	0.00200	mg/L	1	20-Sep-2023 21:07

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: WSP Golder
Project: Frisco CDC GW North CAMU GW Qty
Sample ID: DUP-01
Collection Date: 11-Sep-2023 12:45

ANALYTICAL REPORT

WorkOrder:HS23090922
Lab ID:HS23090922-12
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 19-Sep-2023		Analyst: MSC	
Arsenic	0.000401	J	0.000400	0.00200	mg/L	1	20-Sep-2023 01:12
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 01:12
Lead	0.000869	J	0.000600	0.00200	mg/L	1	20-Sep-2023 01:12
Selenium	U		0.00110	0.00200	mg/L	1	20-Sep-2023 01:12
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 20-Sep-2023		Analyst: MSC	
Arsenic	0.000447	J	0.000400	0.00200	mg/L	1	20-Sep-2023 21:09
Cadmium	U		0.000200	0.00200	mg/L	1	20-Sep-2023 21:09
Lead	U		0.000600	0.00200	mg/L	1	20-Sep-2023 21:09
Selenium	U		0.00110	0.00200	mg/L	1	20-Sep-2023 21:09

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Weight / Prep Log

Client: WSP Golder
Project: Frisco CDC GW North CAMU GW Qty
WorkOrder: HS23090922

Batch ID: 200631	Start Date: 19 Sep 2023 14:00	End Date: 19 Sep 2023 14:00
Method: WATER - SW3010A	Prep Code: 3010A	

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS23090922-01		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23090922-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23090922-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23090922-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23090922-05		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23090922-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23090922-07		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23090922-08		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23090922-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23090922-10		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23090922-11		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23090922-12		10 (mL)	10 (mL)	1	120 plastic HNO3

Batch ID: 200661	Start Date: 20 Sep 2023 09:30	End Date: 20 Sep 2023 09:30
Method: DISS METALS PREP - WATER - SW3010A	Prep Code: 3010A DISS	

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS23090922-01		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23090922-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23090922-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23090922-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23090922-05		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23090922-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23090922-07		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23090922-08		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23090922-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23090922-10		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23090922-11		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23090922-12		10 (mL)	10 (mL)	1	120 plastic HNO3

Client: WSP Golder
Project: Frisco CDC GW North CAMU GW Qty
WorkOrder: HS23090922

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 200631 (0)		Test Name : ICP-MS METALS BY SW6020A			Matrix: Groundwater	
HS23090922-01	MW-45	11 Sep 2023 09:55		19 Sep 2023 14:00	20 Sep 2023 00:35	1
HS23090922-02	PMW-19R	11 Sep 2023 10:30		19 Sep 2023 14:00	20 Sep 2023 00:49	1
HS23090922-03	LMW-8	11 Sep 2023 11:10		19 Sep 2023 14:00	20 Sep 2023 00:50	1
HS23090922-04	LMW-17	11 Sep 2023 12:05		19 Sep 2023 14:00	20 Sep 2023 00:52	1
HS23090922-05	LMW-5	11 Sep 2023 12:45		19 Sep 2023 14:00	20 Sep 2023 00:54	1
HS23090922-06	LMW-21	11 Sep 2023 13:25		19 Sep 2023 14:00	20 Sep 2023 00:56	1
HS23090922-07	PMW-20R	11 Sep 2023 14:05		19 Sep 2023 14:00	20 Sep 2023 00:58	1
HS23090922-08	MW-41	11 Sep 2023 14:45		19 Sep 2023 14:00	20 Sep 2023 01:00	1
HS23090922-09	MW-47	11 Sep 2023 15:30		19 Sep 2023 14:00	20 Sep 2023 01:02	1
HS23090922-10	LMW-9R	12 Sep 2023 08:45		19 Sep 2023 14:00	20 Sep 2023 01:04	1
HS23090922-11	LMW-22	12 Sep 2023 09:30		19 Sep 2023 14:00	20 Sep 2023 01:06	1
HS23090922-12	DUP-01	11 Sep 2023 12:45		19 Sep 2023 14:00	20 Sep 2023 01:12	1
Batch ID: 200661 (0)		Test Name : DISSOLVED METALS BY SW6020A			Matrix: Groundwater	
HS23090922-01	MW-45	11 Sep 2023 09:55		20 Sep 2023 09:30	20 Sep 2023 20:10	1
HS23090922-02	PMW-19R	11 Sep 2023 10:30		20 Sep 2023 09:30	20 Sep 2023 20:43	1
HS23090922-03	LMW-8	11 Sep 2023 11:10		20 Sep 2023 09:30	20 Sep 2023 20:45	1
HS23090922-04	LMW-17	11 Sep 2023 12:05		20 Sep 2023 09:30	20 Sep 2023 20:47	1
HS23090922-05	LMW-5	11 Sep 2023 12:45		20 Sep 2023 09:30	20 Sep 2023 20:49	1
HS23090922-06	LMW-21	11 Sep 2023 13:25		20 Sep 2023 09:30	20 Sep 2023 20:51	1
HS23090922-07	PMW-20R	11 Sep 2023 14:05		20 Sep 2023 09:30	20 Sep 2023 20:59	1
HS23090922-08	MW-41	11 Sep 2023 14:45		20 Sep 2023 09:30	20 Sep 2023 21:01	1
HS23090922-09	MW-47	11 Sep 2023 15:30		20 Sep 2023 09:30	20 Sep 2023 21:03	1
HS23090922-10	LMW-9R	12 Sep 2023 08:45		20 Sep 2023 09:30	20 Sep 2023 21:05	1
HS23090922-11	LMW-22	12 Sep 2023 09:30		20 Sep 2023 09:30	20 Sep 2023 21:07	1
HS23090922-12	DUP-01	11 Sep 2023 12:45		20 Sep 2023 09:30	20 Sep 2023 21:09	1

WorkOrder: HS23090922

InstrumentID: ICPMS06

Test Code: ICP_DISS

Test Number: SW6020A (dissolved)

Test Name: Dissolved Metals by SW6020A

**METHOD DETECTION /
REPORTING LIMITS****Matrix:** Aqueous**Units:** mg/L

Type	Analyte	CAS	DCS Spike	DCS	MDL	PQL
A	Arsenic	7440-38-2	0.00125	0.00137	0.000400	0.00200
A	Cadmium	7440-43-9	0.000500	0.000494	0.000200	0.00200
A	Lead	7439-92-1	0.00125	0.00142	0.000600	0.00200
A	Selenium	7782-49-2	0.00250	0.00245	0.00110	0.00200

WorkOrder: HS23090922

InstrumentID: ICPMS06

Test Code: ICP_TW

Test Number: SW6020A

Test Name: ICP-MS Metals by SW6020A

**METHOD DETECTION /
REPORTING LIMITS****Matrix:** Aqueous**Units:** mg/L

Type	Analyte	CAS	DCS Spike	DCS	MDL	PQL
A	Arsenic	7440-38-2	0.00125	0.00137	0.000400	0.00200
A	Cadmium	7440-43-9	0.000500	0.000494	0.000200	0.00200
A	Lead	7439-92-1	0.00125	0.00142	0.000600	0.00200
A	Selenium	7782-49-2	0.00250	0.00245	0.00110	0.00200

Client: WSP Golder
Project: Frisco CDC GW North CAMU GW Qty
WorkOrder: HS23090922

QC BATCH REPORT

Batch ID: 200631 (0)		Instrument: ICPMS06		Method: ICP-MS METALS BY SW6020A					
MBLK	Sample ID: MBLK-200631	Units: mg/L		Analysis Date: 20-Sep-2023 00:31					
Client ID:	Run ID: ICPMS06_446741	SeqNo: 7553220		PrepDate: 19-Sep-2023		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	U	0.00200							
Cadmium	U	0.00200							
Lead	U	0.00200							
Selenium	U	0.00200							

LCS	Sample ID: LCS-200631	Units: mg/L		Analysis Date: 20-Sep-2023 00:33					
Client ID:	Run ID: ICPMS06_446741	SeqNo: 7553221		PrepDate: 19-Sep-2023		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	0.04837	0.00200	0.05	0	96.7	80 - 120			
Cadmium	0.04906	0.00200	0.05	0	98.1	80 - 120			
Lead	0.04588	0.00200	0.05	0	91.8	80 - 120			
Selenium	0.04843	0.00200	0.05	0	96.9	80 - 120			

MS	Sample ID: HS23090922-01MS	Units: mg/L		Analysis Date: 20-Sep-2023 00:39					
Client ID: MW-45	Run ID: ICPMS06_446741	SeqNo: 7553224		PrepDate: 19-Sep-2023		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	0.04896	0.00200	0.05	0.000312	97.3	80 - 120			
Cadmium	0.04804	0.00200	0.05	0.000001	96.1	80 - 120			
Lead	0.04489	0.00200	0.05	0.000056	89.7	80 - 120			
Selenium	0.05003	0.00200	0.05	0.001708	96.6	80 - 120			

MSD	Sample ID: HS23090922-01MSD	Units: mg/L		Analysis Date: 20-Sep-2023 00:41					
Client ID: MW-45	Run ID: ICPMS06_446741	SeqNo: 7553225		PrepDate: 19-Sep-2023		DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	0.04916	0.00200	0.05	0.000312	97.7	80 - 120	0.04896	0.406	20
Cadmium	0.0484	0.00200	0.05	0.000001	96.8	80 - 120	0.04804	0.742	20
Lead	0.04593	0.00200	0.05	0.000056	91.7	80 - 120	0.04489	2.28	20
Selenium	0.04961	0.00200	0.05	0.001708	95.8	80 - 120	0.05003	0.837	20

Client: WSP Golder
Project: Frisco CDC GW North CAMU GW Qty
WorkOrder: HS23090922

QC BATCH REPORT

Batch ID: 200631 (0)		Instrument: ICPMS06		Method: ICP-MS METALS BY SW6020A					
PDS		Sample ID: HS23090922-01PDS		Units: mg/L		Analysis Date: 20-Sep-2023 00:43			
Client ID: MW-45		Run ID: ICPMS06_446741		SeqNo: 7553226		PrepDate: 19-Sep-2023		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	0.09335	0.00200	0.1	0.000312	93.0	75 - 125			
Cadmium	0.09392	0.00200	0.1	0.000001	93.9	75 - 125			
Lead	0.08905	0.00200	0.1	0.000056	89.0	75 - 125			
Selenium	0.09589	0.00200	0.1	0.001708	94.2	75 - 125			

SD		Sample ID: HS23090922-01SD		Units: mg/L		Analysis Date: 20-Sep-2023 00:37			
Client ID: MW-45		Run ID: ICPMS06_446741		SeqNo: 7553223		PrepDate: 19-Sep-2023		DF: 5	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit Qual
Arsenic	U	0.0100					0.000312	0	10
Cadmium	U	0.0100					0.000001	0	10
Lead	U	0.0100					0.000056	0	10
Selenium	U	0.0100					0.001708	0	10

The following samples were analyzed in this batch:

HS23090922-01	HS23090922-02	HS23090922-03	HS23090922-04
HS23090922-05	HS23090922-06	HS23090922-07	HS23090922-08
HS23090922-09	HS23090922-10	HS23090922-11	HS23090922-12

Client: WSP Golder
Project: Frisco CDC GW North CAMU GW Qty
WorkOrder: HS23090922

QC BATCH REPORT

Batch ID: 200661 (0)		Instrument: ICPMS06		Method: DISSOLVED METALS BY SW6020A (DISSOLVED)					
MBLK	Sample ID: MBLK-F1-200661	Units: mg/L		Analysis Date: 20-Sep-2023 17:35					
Client ID:	Run ID: ICPMS06_446863		SeqNo: 7555781		PrepDate: 20-Sep-2023		DF: 1		
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Arsenic	U	0.00200							
Cadmium	U	0.00200							
Lead	U	0.00200							
Selenium	U	0.00200							

MBLK	Sample ID: MBLK-200661	Units: mg/L		Analysis Date: 20-Sep-2023 17:11					
Client ID:	Run ID: ICPMS06_446863		SeqNo: 7555780		PrepDate: 20-Sep-2023		DF: 1		
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Arsenic	U	0.00200							
Cadmium	U	0.00200							
Lead	U	0.00200							
Selenium	U	0.00200							

LCS	Sample ID: LCS-200661	Units: mg/L		Analysis Date: 20-Sep-2023 17:37					
Client ID:	Run ID: ICPMS06_446863		SeqNo: 7555782		PrepDate: 20-Sep-2023		DF: 1		
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Arsenic	0.04804	0.00200	0.05	0	96.1	80 - 120			
Cadmium	0.0486	0.00200	0.05	0	97.2	80 - 120			
Lead	0.04562	0.00200	0.05	0	91.2	80 - 120			
Selenium	0.04888	0.00200	0.05	0	97.8	80 - 120			

MS	Sample ID: HS23090922-01MS	Units: mg/L		Analysis Date: 20-Sep-2023 20:14					
Client ID: MW-45	Run ID: ICPMS06_446863		SeqNo: 7556213		PrepDate: 20-Sep-2023		DF: 1		
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Arsenic	0.05002	0.00200	0.05	0.000331	99.4	75 - 125			
Cadmium	0.04929	0.00200	0.05	0.000014	98.5	75 - 125			
Lead	0.04836	0.00200	0.05	0.000011	96.7	75 - 125			
Selenium	0.05146	0.00200	0.05	0.001518	99.9	75 - 125			

Client: WSP Golder
 Project: Frisco CDC GW North CAMU GW Qty
 WorkOrder: HS23090922

QC BATCH REPORT

Batch ID: 200661 (0)		Instrument: ICPMS06		Method: DISSOLVED METALS BY SW6020A (DISSOLVED)					
MSD		Sample ID: HS23090922-01MSD		Units: mg/L		Analysis Date: 20-Sep-2023 20:16			
Client ID: MW-45		Run ID: ICPMS06_446863		SeqNo: 7556214		PrepDate: 20-Sep-2023		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	0.0487	0.00200	0.05	0.000331	96.7	75 - 125	0.05002	2.68	20
Cadmium	0.04843	0.00200	0.05	0.000014	96.8	75 - 125	0.04929	1.75	20
Lead	0.04648	0.00200	0.05	0.000011	92.9	75 - 125	0.04836	3.96	20
Selenium	0.05064	0.00200	0.05	0.001518	98.3	75 - 125	0.05146	1.6	20
PDS		Sample ID: HS23090922-01PDS		Units: mg/L		Analysis Date: 20-Sep-2023 20:18			
Client ID: MW-45		Run ID: ICPMS06_446863		SeqNo: 7556215		PrepDate: 20-Sep-2023		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	0.1007	0.00200	0.1	0.000331	100	75 - 125			
Cadmium	0.09936	0.00200	0.1	0.000014	99.3	75 - 125			
Lead	0.09679	0.00200	0.1	0.000011	96.8	75 - 125			
Selenium	0.1003	0.00200	0.1	0.001518	98.8	75 - 125			
SD		Sample ID: HS23090922-01SD		Units: mg/L		Analysis Date: 20-Sep-2023 20:12			
Client ID: MW-45		Run ID: ICPMS06_446863		SeqNo: 7556212		PrepDate: 20-Sep-2023		DF: 5	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit Qual
Arsenic	U	0.0100					0.000331	0	10
Cadmium	U	0.0100					0.000014	0	10
Lead	U	0.0100					0.000011	0	10
Selenium	U	0.0100					0.001518	0	10
The following samples were analyzed in this batch:									
HS23090922-01		HS23090922-02		HS23090922-03		HS23090922-04			
HS23090922-05		HS23090922-06		HS23090922-07		HS23090922-08			
HS23090922-09		HS23090922-10		HS23090922-11		HS23090922-12			

Client: WSP Golder
Project: Frisco CDC GW North CAMU GW Qty
WorkOrder: HS23090922

**QUALIFIERS,
ACRONYMS, UNITS**

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	88-00356	27-Mar-2024
California	2919; 2024	30-Apr-2024
Dept of Defense	L23-358	31-May-2025
Florida	E87611-38	30-Jun-2024
Illinois	2000322023-11	30-Jun-2024
Kansas	E-10352 2023-2024	31-Jul-2024
Louisiana	03087 2023-2024	30-Jun-2024
Maryland	343; 2023-2024	30-Jun-2024
North Carolina	624-2023	31-Dec-2023
North Dakota	R-193 2023-2024	30-Apr-2024
Texas	T104704231-23-31	30-Apr-2024
Utah	TX026932023-14	31-Jul-2024

Sample Receipt Checklist

Work Order ID: HS23090922

Date/Time Received: **14-Sep-2023 10:00**

Client Name: Golder St Louis

Received by: **Malcolm Burleson**

Completed By: <u>/S/ Corey Grandits</u>	16-Sep-2023 11:44	Reviewed by: <u>/S/ Tyler Monroe</u>	19-Sep-2023 14:52
eSignature	Date/Time	eSignature	Date/Time

Matrices: **W**Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	2 Page(s)
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	COC IDs:298425 , 298424
Samplers name present on COC?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	
Temperature(s)/Thermometer(s):	3.1uc/3.0c IR31		
Cooler(s)/Kit(s):	51025		
Date/Time sample(s) sent to storage:	9/16/23		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☒
Water - pH acceptable upon receipt?	Yes ☒	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☒	N/A ☐
pH adjusted by:			

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

Corrective Action:



Cincinnati, OH
+1 513 733 5336

Fort Collins, CO
+1 970 490 1511

Everett, WA
+1 425 356 2600

Holland, MI
+1 616 399 6070

Chain of Custody Form

Page 1 of 2

COC ID: 298425

Houston, TX
+1 281 530 5656

Spring City, PA
+1 610 948 4903

South Charleston, WV
+1 304 356 3168

Middletown, PA
+1 717 944 5541

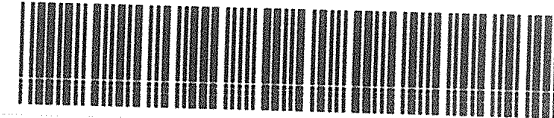
Salt Lake City, UT
+1 801 266 7700

York, PA
+1 717 505 5280

Customer Information		Project Information		ALS Project Manager:		ALS Work Order #:	
Purchase Order	GL2040906205	Project Name	Frisco CDC North CAMU GW Q'ty			Parameter/Method Request for Analysis	
Work Order		Project Number	GL2040906205			A ICP_TW (6020A - Total As, Cd, Pb, Se (QTY)) [120ml PHNO3	
Company Name	WSP Golder	Bill To Company	WSP Golder			B (6020A - DISSolved As, Cd, Pb, Se (QTY))-FidFltr [120ml	
Send Report To	Rahel Pommerenke	Invoice Attn	Accounts Payable WSP			C MS/MSD [1x120ml P HNO3 (T), 1x120ml P HNO3 (D)]	
Address	701 Emerson Road Suite 250	Address	701 Emerson Road Suite 250			D	
City/State/Zip	Creve Coeur, MO 63141	City/State/Zip	Creve Coeur MO 63141			E	
Phone	(314) 394-6125	Phone	(314) 984-8800			F	
Fax		Fax				G	
e-Mail Address	Rahel_Pommerenke@golder.com	e-Mail Address	USENVAccountspayable@wsp.com			H	
						I	
						J	

HS23090922

WSP Golder
Frisco CDC GW North CAMU



No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-45	9-11-23	0955	Groundwa	2,8	4	X	X	X								
2	PMW-19R	9-11-23	1030	Groundwa	2,8	2	X	X									
3	LMW-8	9-11-23	1110	Groundwa	2,8	2	X	X									
4	LMW-17	9-11-23	1205	Groundwa	2,8	2	X	X									
5	LMW-5	9-11-23	1245	Groundwa	2,8	2	X	X									
6	LMW-21	9-11-23	1325	Groundwa	2,8	2	X	X									
7	PMW-20R	9-11-23	1405	Groundwa	2,8	2	X	X									
8	MW-41	9-11-23	1445	Groundwa	2,8	2	X	X									
9	MW-47	9-11-23	1530	Groundwa	2,8	2	X	X									
10	LMW-9R	9-12-23	0845	Groundwa	2,8	2	X	X									

Sampler(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)		Results Due Date:	
JOHN BEATON		FEDEX		☐ STD 10 Wk Days ☒ 5 Wk Days ☐ 2 Wk Days ☐ 24-hour			
Relinquished by:	Date: 9-13-23	Time: 1600	Received by:	Notes: Frisco CDC North CAMU GW			
Relinquished by:	Date:	Time:	Received by (Laboratory):	Cooler ID	Cooler Temp.	QC Package: (Check One Box Below)	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	31023	3.1w3	☐ Level II Std QC	☒ TRRP Check list
					-0.16	☐ Level III Std QC/Raw Data	☐ TRRP Level IV
						☐ Level IV SW846/CLP	
						☐ Other	

Preservative Key: 1-HCl 2-HNO₃ 3-H₂SO₄ 4-NaOH 5-Na₂S₂O₃ 6-NaHSO₄ 7-Other 8-4°C 9-5035

- note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

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Everett, WA
+1 425 356 2600

Fort Collins, CO
+1 970 490 1511

Holland, MI
+1 616 399 6070

Chain of Custody Form

Page 2 of 2

COC ID: 298424

Houston, TX
+1 281 530 5656

Middletown, PA
+1 717 944 5541

Spring City, PA
+1 610 948 4903

Salt Lake City, UT
+1 801 266 7700

South Charleston, WV
+1 304 356 3168

York, PA
+1 717 505 5280

Customer Information		Project Information		ALS Project Manager:		ALS Work Order #:	
Purchase Order	GL2040906205	Project Name	Frisco CDC North CAMU GW Qty			Parameter/Method Request for Analysis	
Work Order		Project Number	GL2040906205				
Company Name	WSP Golder	Bill To Company	WSP Golder				
Send Report To	Rahel Pommerenke	Invoice Attn	Accounts Payable WSP				
Address	701 Emerson Road Suite 250	Address	701 Emerson Road Suite 250				
City/State/Zip	Creve Coeur, MO 63141	City/State/Zip	Creve Coeur MO 63141				
Phone	(314) 394-6125	Phone	(314) 984-8800				
Fax		Fax					
e-Mail Address	Rahel_Pommerenke@golder.com	e-Mail Address	USENVAccountspayable@wsp.com				

HS23090922
WSP Golder
Frisco CDC GW North CAMU



No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	LMW-22	9-12-23	0930	Groundwa	2,8	2	X	X									
2	DUP-01	9-11-23	1245	Groundwa	2,8	2	X	X									
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign <i>JOHN BRAYTON</i>		Shipment Method FEDEX		Required Turnaround Time: (Check Box) ☐ STD 10 Wk Days ☒ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour		Results Due Date:	
Relinquished by:	Date: 9-13-23	Time: 1600	Received by:	Notes: Frisco CDC North CAMU GW			
Relinquished by:	Date:	Time:	Received by (Laboratory):	Cooler ID	Cooler Temp.	QC Package: (Check One Box Below)	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	S1025	3.122	☐ Level II Std QC	☒ TRRP Checklist
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C 9-5035				-0.12		☐ Level III Std QC/RAW Date	☐ TRRP Level IV
						☐ Level IV SWM43/CLP	
						☐ Other	

- ote: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

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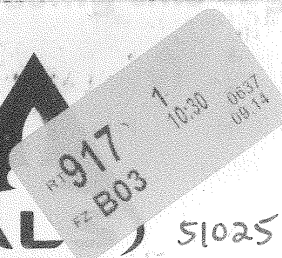
ALS
10450 Stancliff Rd. 210
Houston, Texas 77057
Tel. +1 281 530 6666
Fax. +1 281 530 6666

51025

CUSTODY SEAL	
Date: 7-13-23	Time: 1650
Name: [Signature]	
Company: [Signature]	

Seal Broken By:
gm
Date: 09/14/23

51025 SEP 14 2023



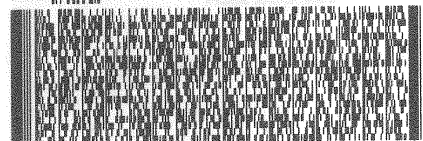
ORIGIN ID: SGRA (512) 695-6608
JOHN BRAYTON
GOLDER ASSOCIATES
1023 CALLENDER HILL RD
MANFELD, TX 760636091
UNITED STATES US

SHIP DATE: 06SEP23
ACTWGT: 5.25 LB MAN
CAD: 0221247/CAFE3751
DIMS: 19x16x13 IN

TO SHIPPING DEPT
ALS LABORATORY GROUP
10450 STANCLIFF RD
SUITE 210
HOUSTON TX 77099

(281) 530-6666
REF: FRISCO CDC NORTH CAMU GW B0=95343 DW

RMA: || || || ||



FedEx
Express

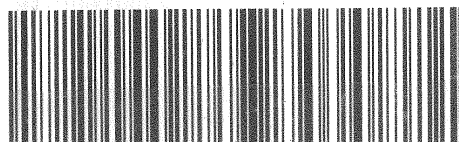


FedEx
TRK# 6862 6796 0637
0221

THU - 14 SEP 10:30A
PRIORITY OVERNIGHT

43 SGRA

77099
TX-US IAH





10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887

December 08, 2023

William Wedge
WSP Golder
701 Emerson Road Suite 250
Creve Coeur, MO 63141

Work Order: **HS23120154**

Laboratory Results for: **Frisco CDC GW North CAMU**

Dear William Wedge,

ALS Environmental received 12 sample(s) on Dec 01, 2023 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: DAYNA.FISHER

Tyler Monroe

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23120154

**TRRP Laboratory Data
Package Cover Page**

This data package consists of all or some of the following as applicable:

This signature page, the laboratory review checklist, and the following reportable data:

- R1 Field chain-of-custody documentation;
- R2 Sample identification cross-reference;
- R3 Test reports (analytical data sheets) for each environmental sample that includes:
 - a) Items consistent with NELAC Chapter 5,
 - b) dilution factors,
 - c) preparation methods,
 - d) cleanup methods, and
 - e) if required for the project, tentatively identified compounds (TICs).
- R4 Surrogate recovery data including:
 - a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- R5 Test reports/summary forms for blank samples;
- R6 Test reports/summary forms for laboratory control samples (LCSs) including:
 - a) LCS spiking amounts,
 - b) Calculated %R for each analyte, and
 - c) The laboratory's LCS QC limits.
- R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a) Samples associated with the MS/MSD clearly identified,
 - b) MS/MSD spiking amounts,
 - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d) Calculated %Rs and relative percent differences (RPDs), and
 - e) The laboratory's MS/MSD QC limits.
- R8 Laboratory analytical duplicate (if applicable) recovery and precision:
 - a) the amount of analyte measured in the duplicate,
 - b) the calculated RPD, and
 - c) the laboratory's QC limits for analytical duplicates.
- R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 Other problems or anomalies.
The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Client: WSP Golder**Project:** Frisco CDC GW North CAMU**WorkOrder:** HS23120154**TRRP Laboratory Data
Package Cover Page**

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory have been identified by the laboratory in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: ☒ [NA] This laboratory meets an exception under 30 TAC §25.6 and was last inspected by ☐ TCEQ or ☐ _____ on (enter date of last inspection). Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.



Tyler Monroe

Laboratory Review Checklist: Reportable Data							
Laboratory Name: ALS Laboratory Group				LRC Date: 12/08/2023			
Project Name: Frisco CDC GW North CAMU				Laboratory Job Number: HS23120154			
Reviewer Name: Tyler Monroe				Prep Batch Number(s): 204439, 204445			
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW-846 Method 5035?			X		
		If required for the project, TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Were all necessary corrective actions performed for the reported data?	X				
		Was applicable and available technology used to lower the SDL and minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Program for the analytes, matrices and methods associated with this laboratory data package?	X				

Laboratory Review Checklist: Supporting Data							
Laboratory Name: ALS Laboratory Group				LRC Date: 12/08/2023			
Project Name: Frisco CDC GW North CAMU				Laboratory Job Number: HS23120154			
Reviewer Name: Tyler Monroe				Prep Batch Number(s): 204439, 204445			
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB)					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?		X			1
S3	O	Mass spectral tuning:					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS):					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs):					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results:					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports:					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs):					
		Are laboratory SOPs current and on file for each method performed?	X				

Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
O = Organic Analyses; I = Inorganic Analyses (and general chemistry, when applicable);
NA = Not Applicable;
NR = Not Reviewed;
R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports	
Laboratory Name: ALS Laboratory Group	LRC Date: 12/08/2023
Project Name: Frisco CDC GW North CAMU	Laboratory Job Number: HS23120154
Reviewer Name: Tyler Monroe	Prep Batch Number(s): 204439, 204445
ER#⁵	Description
1	See Run Log and CCB Exception Reports
Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. O = Organic Analyses; I = Inorganic Analyses (and general chemistry, when applicable); NA = Not Applicable; NR = Not Reviewed; R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).	

FORM 13 - ANALYSIS RUN LOG

Client: WSP Golder

Run ID:ICPMS07_453459

Project: Frisco CDC GW North CAMU

Instrument:ICPMS07

WorkOrder: HS23120154

Method:SW6020A

Start Date: 07-Dec-2023

End Date: 08-Dec-2023

Sample No.	D/F	Time	FileID	Analytes
ICV	1	07-Dec-2023 10:37	025_ICV.d	AS CD PB SE
LLICV5	1	07-Dec-2023 10:39	026LCV5.d	AS CD PB SE
LLICV2	1	07-Dec-2023 10:42	027LCV2.d	AS CD PB SE
ICB	1	07-Dec-2023 10:44	028_ICB.d	AS CD PB SE
ICSA	1	07-Dec-2023 10:46	029ICSA.d	AS CD PB SE
ICSAB	1	07-Dec-2023 10:49	030ICSB.d	AS CD PB SE
CCV 1	1	07-Dec-2023 10:57	033_CCV.d	AS CD PB SE
CCB 1	1	07-Dec-2023 10:59	034_CCB.d	AS CD PB SE
CCV 2	1	07-Dec-2023 11:03	035_CCV.d	AS CD PB SE
CCB 2	1	07-Dec-2023 11:05	036_CCB.d	AS CD PB SE
CCV 3	1	07-Dec-2023 11:31	047_CCV.d	AS CD PB SE
CCB 3	1	07-Dec-2023 11:33	048_CCB.d	AS CD PB SE
CCV 4	1	07-Dec-2023 11:59	059_CCV.d	AS CD PB SE
CCB 4	1	07-Dec-2023 12:02	060_CCB.d	AS CD PB SE
CCV 5	1	07-Dec-2023 12:28	071_CCV.d	AS CD PB SE
CCB 5	1	07-Dec-2023 12:31	072_CCB.d	AS CD PB SE
CCB 6	1	07-Dec-2023 12:34	073_CCB.d	AS CD PB SE
CCV 6	1	07-Dec-2023 13:00	084_CCV.d	AS CD PB SE
CCB 7	1	07-Dec-2023 13:03	085_CCB.d	AS CD PB SE
CCV 7	1	07-Dec-2023 13:35	096_CCV.d	AS CD PB SE
CCB 8	1	07-Dec-2023 13:38	097_CCB.d	AS CD PB SE
CCV 8	1	07-Dec-2023 14:03	108_CCV.d	AS CD PB SE
CCB 9	1	07-Dec-2023 14:06	109_CCB.d	AS CD PB SE
CCB 10	1	07-Dec-2023 14:08	110_CCB.d	AS CD PB SE
CCV 9	1	07-Dec-2023 14:34	121_CCV.d	AS CD PB SE
CCB 11	1	07-Dec-2023 14:36	122_CCB.d	AS CD PB SE
CCV 10	1	07-Dec-2023 15:02	133_CCV.d	AS CD PB SE
CCB 12	1	07-Dec-2023 15:04	134_CCB.d	AS CD PB SE
CCB 13	1	07-Dec-2023 15:20	135_CCB.d	AS CD PB SE
CCV 11	1	07-Dec-2023 15:23	136_CCV.d	AS CD PB SE
CCV 12	1	07-Dec-2023 15:48	147_CCV.d	AS CD PB SE
CCB 14	1	07-Dec-2023 15:51	148_CCB.d	AS CD PB SE
CCV 13	1	07-Dec-2023 16:23	160_CCV.d	AS CD PB SE
CCB 15	1	07-Dec-2023 16:25	161_CCB.d	AS CD PB SE
CCB 16	1	07-Dec-2023 16:29	162_CCB.d	AS CD PB SE
CCV 14	1	07-Dec-2023 16:31	163_CCV.d	AS CD PB SE
CCV 15	1	07-Dec-2023 16:57	174_CCV.d	AS CD PB SE
CCB 17	1	07-Dec-2023 16:59	175_CCB.d	AS CD PB SE
CCB 18	1	07-Dec-2023 17:01	176_CCB.d	AS CD PB SE
CCV 16	1	07-Dec-2023 17:04	177_CCV.d	AS CD PB SE
CCV 17	1	07-Dec-2023 17:29	188_CCV.d	AS CD PB SE
CCV 18	1	07-Dec-2023 17:29	188_CCV.d	AS CD PB SE
CCB 19	1	07-Dec-2023 17:32	189_CCB.d	AS CD PB SE
CCB 20	1	07-Dec-2023 17:32	189_CCB.d	AS CD PB SE
CCV 19	1	07-Dec-2023 17:58	200_CCV.d	AS CD PB SE
CCB 21	1	07-Dec-2023 18:00	201_CCB.d	AS CD PB SE
CCV 20	1	07-Dec-2023 18:02	202_CCV.d	AS CD PB SE
CCV 21	1	07-Dec-2023 18:05	203_CCV.d	AS CD PB SE
CCB 22	1	07-Dec-2023 18:07	204_CCB.d	AS CD PB SE
CCV 22	1	07-Dec-2023 18:33	215_CCV.d	AS CD PB SE

FORM 13 - ANALYSIS RUN LOG

Client: WSP Golder

Run ID:ICPMS07_453459

Project: Frisco CDC GW North CAMU

Instrument:ICPMS07

WorkOrder: HS23120154

Method:SW6020A

Start Date: 07-Dec-2023

End Date: 08-Dec-2023

Sample No.	D/F	Time	FileID	Analytes
CCB 23	1	07-Dec-2023 18:35	216_CCB.d	AS CD PB SE
CCV 23	1	07-Dec-2023 19:02	227_CCV.d	AS CD PB SE
CCB 24	1	07-Dec-2023 19:04	228_CCB.d	AS CD PB SE
CCV 24	1	07-Dec-2023 19:18	232_CCV.d	AS CD PB SE
CCB 25	1	07-Dec-2023 19:20	233_CCB.d	AS CD PB SE
CCV 25	1	07-Dec-2023 19:46	244_CCV.d	AS CD PB SE
CCB 26	1	07-Dec-2023 19:48	245_CCB.d	AS CD PB SE
ICV	1	07-Dec-2023 20:56	267_ICV.d	AS CD PB SE
LLICV5	1	07-Dec-2023 20:58	268LCV5.d	AS CD PB SE
LLICV2	1	07-Dec-2023 21:01	269LCV2.d	AS CD PB SE
ICB	1	07-Dec-2023 21:03	270_ICB.d	AS CD PB SE
CCV 26	1	07-Dec-2023 21:08	272_CCV.d	AS CD PB SE
CCB 27	1	07-Dec-2023 21:10	273_CCB.d	AS CD PB SE
CCV 27	1	07-Dec-2023 21:31	282_CCV.d	AS CD PB SE
CCB 28	1	07-Dec-2023 21:33	283_CCB.d	AS CD PB SE
CCV 28	1	07-Dec-2023 21:43	287_CCV.d	AS CD PB SE
CCB 29	1	07-Dec-2023 21:45	288_CCB.d	AS CD PB SE
MBLK-204439	1	07-Dec-2023 21:47	289SMPL.d	AS CD PB SE
LCS-204439	1	07-Dec-2023 21:50	290SMPL.d	AS CD PB SE
MW-45	1	07-Dec-2023 21:52	291SMPL.d	AS CD PB SE
MW-45SD	5	07-Dec-2023 21:54	292SMPL.d	AS CD PB SE
MW-45MS	1	07-Dec-2023 21:57	293SMPL.d	AS CD PB SE
MW-45MSD	1	07-Dec-2023 21:59	294SMPL.d	AS CD PB SE
MW-45PDS	1	07-Dec-2023 22:02	295SMPL.d	AS CD PB SE
CCV 29	1	07-Dec-2023 22:04	296_CCV.d	AS CD PB SE
CCB 30	1	07-Dec-2023 22:06	297_CCB.d	AS CD PB SE
PMW-19R	1	07-Dec-2023 22:18	302SMPL.d	AS CD PB SE
LMW-8	1	07-Dec-2023 22:20	303SMPL.d	AS CD PB SE
LMW-17	1	07-Dec-2023 22:23	304SMPL.d	AS CD PB SE
LMW-5	1	07-Dec-2023 22:25	305SMPL.d	AS CD PB SE
LMW-21	1	07-Dec-2023 22:27	306SMPL.d	AS CD PB SE
DUP-01	1	07-Dec-2023 22:30	307SMPL.d	AS CD PB SE
CCV 30	1	07-Dec-2023 22:32	308_CCV.d	AS CD PB SE
CCB 31	1	07-Dec-2023 22:34	309_CCB.d	AS CD PB SE
PMW-20R	1	07-Dec-2023 22:37	310SMPL.d	AS CD PB SE
MW-41	1	07-Dec-2023 22:39	311SMPL.d	AS CD PB SE
MW-47	1	07-Dec-2023 22:41	312SMPL.d	AS CD PB SE
LMW-9R	1	07-Dec-2023 22:44	313SMPL.d	AS CD PB SE
LMW-22	1	07-Dec-2023 22:46	314SMPL.d	AS CD PB SE
CCV 31	1	07-Dec-2023 22:48	315_CCV.d	AS CD PB SE
CCB 32	1	07-Dec-2023 22:51	316_CCB.d	AS CD PB SE
CCB 33	1	07-Dec-2023 23:10	324_CCB.d	AS CD PB SE
CCV 32	1	07-Dec-2023 23:16	326_CCV.d	AS CD PB SE
ICSA	1	07-Dec-2023 23:23	329ICSA.d	AS CD PB SE
ICSAB	1	07-Dec-2023 23:25	330ICSB.d	AS CD PB SE
CCV 33	1	07-Dec-2023 23:32	333_CCV.d	AS CD PB SE
CCB 34	1	07-Dec-2023 23:35	334_CCB.d	AS CD PB SE
CCV 34	1	07-Dec-2023 23:51	341_CCV.d	AS CD PB SE
CCB 35	1	07-Dec-2023 23:53	342_CCB.d	AS CD PB SE
CCV 35	1	08-Dec-2023 00:14	351_CCV.d	AS CD PB SE

FORM 13 - ANALYSIS RUN LOG**Client:** WSP Golder

Run ID:ICPMS07_453459

Project: Frisco CDC GW North CAMU

Instrument:ICPMS07

WorkOrder: HS23120154

Method:SW6020A

Start Date: 07-Dec-2023

End Date: 08-Dec-2023

Sample No.	D/F	Time	FileID	Analytes
CCB 36	1	08-Dec-2023 00:17	352_CCB.d	AS CD PB SE
CCV 36	1	08-Dec-2023 00:43	363_CCV.d	AS CD PB SE
CCB 37	1	08-Dec-2023 00:45	364_CCB.d	AS CD PB SE
CCV 37	1	08-Dec-2023 01:11	375_CCV.d	AS CD PB SE
CCB 38	1	08-Dec-2023 01:14	376_CCB.d	AS CD PB SE
CCV 38	1	08-Dec-2023 01:16	377_CCV.d	AS CD PB SE
CCB 39	1	08-Dec-2023 01:18	378_CCB.d	AS CD PB SE
LLCCV5	1	08-Dec-2023 01:23	380LCV5.d	AS CD PB SE
LLCCV2	1	08-Dec-2023 01:25	381LCV2.d	AS CD PB SE
ICSA	1	08-Dec-2023 01:28	382ICSA.d	AS CD PB SE
ICSAB	1	08-Dec-2023 01:30	383ICSB.d	AS CD PB SE

CCB EXCEPTIONS REPORT

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23120154

Run ID:ICPMS07_453459
Instrument:ICPMS07
Method:E200.8

CCB 9	Date: 07-Dec-2023 14:06	Seq: 7713051	D/F: 1	Units: µg/L
Analyte	Result	MDL	Report Limit	
Cadmium	0.115	0.077	2	
CCB 11	Date: 07-Dec-2023 14:36	Seq: 7713536	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Cadmium	0.288	0.2	2	
CCB 12	Date: 07-Dec-2023 15:04	Seq: 7713548	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Selenium	1.18	1.1	2	
CCB 13	Date: 07-Dec-2023 15:20	Seq: 7713549	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Selenium	1.7	1.1	2	
CCB 22	Date: 07-Dec-2023 18:07	Seq: 7714114	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Cadmium	0.25	0.2	2	
CCB 23	Date: 07-Dec-2023 18:35	Seq: 7714123	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Selenium	1.432	1.1	2	
CCB 31	Date: 07-Dec-2023 22:34	Seq: 7714422	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Selenium	1.285	1.1	2	
CCB 32	Date: 07-Dec-2023 22:51	Seq: 7714429	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Selenium	1.945	1.1	2	
CCB 33	Date: 07-Dec-2023 23:10	Seq: 7714437	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Cadmium	0.258	0.2	2	
Selenium	1.796	1.1	2	
CCB 34	Date: 07-Dec-2023 23:35	Seq: 7714447	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Selenium	1.353	1.1	2	
CCB 36	Date: 08-Dec-2023 00:17	Seq: 7714803	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Selenium	1.11	1.1	2	
CCB 37	Date: 08-Dec-2023 00:45	Seq: 7714815	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Selenium	1.769	1.1	2	
CCB 39	Date: 08-Dec-2023 01:18	Seq: 7714789	D/F: 1	Units: ug/L
Analyte	Result	MDL	Report Limit	
Selenium	1.32	1.1	2	

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Work Order: HS23120154

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23120154-01	MW-45	Groundwater		29-Nov-2023 09:45	01-Dec-2023 10:45	☐
HS23120154-02	PMW-19R	Groundwater		29-Nov-2023 10:20	01-Dec-2023 10:45	☐
HS23120154-03	LMW-8	Groundwater		29-Nov-2023 11:05	01-Dec-2023 10:45	☐
HS23120154-04	LMW-17	Groundwater		29-Nov-2023 11:40	01-Dec-2023 10:45	☐
HS23120154-05	LMW-5	Groundwater		29-Nov-2023 12:15	01-Dec-2023 10:45	☐
HS23120154-06	LMW-21	Groundwater		29-Nov-2023 12:55	01-Dec-2023 10:45	☐
HS23120154-07	DUP-01	Groundwater		29-Nov-2023 12:15	01-Dec-2023 10:45	☐
HS23120154-08	PMW-20R	Groundwater		29-Nov-2023 13:45	01-Dec-2023 10:45	☐
HS23120154-09	MW-41	Groundwater		29-Nov-2023 14:30	01-Dec-2023 10:45	☐
HS23120154-10	MW-47	Groundwater		29-Nov-2023 15:20	01-Dec-2023 10:45	☐
HS23120154-11	LMW-9R	Groundwater		30-Nov-2023 08:15	01-Dec-2023 10:45	☐
HS23120154-12	LMW-22	Groundwater		30-Nov-2023 08:55	01-Dec-2023 10:45	☐

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: MW-45
Collection Date: 29-Nov-2023 09:45

ANALYTICAL REPORT

WorkOrder:HS23120154
Lab ID:HS23120154-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 06-Dec-2023		Analyst: MSC	
Arsenic	U		0.000400	0.00200	mg/L	1	07-Dec-2023 21:52
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 21:52
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 21:52
Selenium	0.00199	J	0.00110	0.00200	mg/L	1	07-Dec-2023 21:52
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 06-Dec-2023		Analyst: JC	
Arsenic	U		0.000400	0.00200	mg/L	1	07-Dec-2023 23:01
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 23:01
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 23:01
Selenium	0.00139	J	0.00110	0.00200	mg/L	1	07-Dec-2023 23:01

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: PMW-19R
Collection Date: 29-Nov-2023 10:20

ANALYTICAL REPORT

WorkOrder:HS23120154
Lab ID:HS23120154-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 06-Dec-2023		Analyst: MSC	
Arsenic	0.000542	J	0.000400	0.00200	mg/L	1	07-Dec-2023 22:18
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 22:18
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 22:18
Selenium	0.00340		0.00110	0.00200	mg/L	1	07-Dec-2023 22:18
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 06-Dec-2023		Analyst: JC	
Arsenic	0.000458	J	0.000400	0.00200	mg/L	1	07-Dec-2023 23:20
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 23:20
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 23:20
Selenium	0.00195	J	0.00110	0.00200	mg/L	1	07-Dec-2023 23:20

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: LMW-8
Collection Date: 29-Nov-2023 11:05

ANALYTICAL REPORT

WorkOrder:HS23120154
Lab ID:HS23120154-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 06-Dec-2023		Analyst: MSC	
Arsenic	0.000531	J	0.000400	0.00200	mg/L	1	07-Dec-2023 22:20
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 22:20
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 22:20
Selenium	U		0.00110	0.00200	mg/L	1	07-Dec-2023 22:20
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 06-Dec-2023		Analyst: JC	
Arsenic	0.000572	J	0.000400	0.00200	mg/L	1	07-Dec-2023 23:22
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 23:22
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 23:22
Selenium	U		0.00110	0.00200	mg/L	1	07-Dec-2023 23:22

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: LMW-17
Collection Date: 29-Nov-2023 11:40

ANALYTICAL REPORT

WorkOrder:HS23120154
Lab ID:HS23120154-04
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 06-Dec-2023		Analyst: MSC	
Arsenic	0.000711	J	0.000400	0.00200	mg/L	1	07-Dec-2023 22:23
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 22:23
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 22:23
Selenium	0.00233		0.00110	0.00200	mg/L	1	07-Dec-2023 22:23
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 06-Dec-2023		Analyst: JC	
Arsenic	0.000662	J	0.000400	0.00200	mg/L	1	07-Dec-2023 23:24
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 23:24
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 23:24
Selenium	U		0.00110	0.00200	mg/L	1	07-Dec-2023 23:24

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: LMW-5
Collection Date: 29-Nov-2023 12:15

ANALYTICAL REPORT

WorkOrder:HS23120154
Lab ID:HS23120154-05
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A			Prep:SW3010A / 06-Dec-2023		Analyst: MSC
Arsenic	U		0.000400	0.00200	mg/L	1	07-Dec-2023 22:25
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 22:25
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 22:25
Selenium	0.00229		0.00110	0.00200	mg/L	1	07-Dec-2023 22:25
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)			Prep:SW3010A / 06-Dec-2023		Analyst: JC
Arsenic	0.000487	J	0.000400	0.00200	mg/L	1	07-Dec-2023 23:26
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 23:26
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 23:26
Selenium	U		0.00110	0.00200	mg/L	1	07-Dec-2023 23:26

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: LMW-21
Collection Date: 29-Nov-2023 12:55

ANALYTICAL REPORT

WorkOrder:HS23120154
Lab ID:HS23120154-06
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 06-Dec-2023		Analyst: MSC	
Arsenic	0.000499	J	0.000400	0.00200	mg/L	1	07-Dec-2023 22:27
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 22:27
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 22:27
Selenium	0.00597		0.00110	0.00200	mg/L	1	07-Dec-2023 22:27
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 06-Dec-2023		Analyst: JC	
Arsenic	0.000545	J	0.000400	0.00200	mg/L	1	07-Dec-2023 23:28
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 23:28
Lead	0.000673	J	0.000600	0.00200	mg/L	1	07-Dec-2023 23:28
Selenium	0.00460		0.00110	0.00200	mg/L	1	07-Dec-2023 23:28

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: DUP-01
Collection Date: 29-Nov-2023 12:15

ANALYTICAL REPORT

WorkOrder:HS23120154
Lab ID:HS23120154-07
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 06-Dec-2023		Analyst: MSC	
Arsenic	U		0.000400	0.00200	mg/L	1	07-Dec-2023 22:30
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 22:30
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 22:30
Selenium	0.00224		0.00110	0.00200	mg/L	1	07-Dec-2023 22:30
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 06-Dec-2023		Analyst: JC	
Arsenic	U		0.000400	0.00200	mg/L	1	07-Dec-2023 23:33
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 23:33
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 23:33
Selenium	U		0.00110	0.00200	mg/L	1	07-Dec-2023 23:33

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: PMW-20R
Collection Date: 29-Nov-2023 13:45

ANALYTICAL REPORT

WorkOrder:HS23120154
Lab ID:HS23120154-08
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 06-Dec-2023		Analyst: MSC	
Arsenic	U		0.000400	0.00200	mg/L	1	07-Dec-2023 22:37
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 22:37
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 22:37
Selenium	0.00355		0.00110	0.00200	mg/L	1	07-Dec-2023 22:37
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 06-Dec-2023		Analyst: JC	
Arsenic	U		0.000400	0.00200	mg/L	1	07-Dec-2023 23:35
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 23:35
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 23:35
Selenium	0.00291		0.00110	0.00200	mg/L	1	07-Dec-2023 23:35

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: MW-41
Collection Date: 29-Nov-2023 14:30

ANALYTICAL REPORT

WorkOrder:HS23120154
Lab ID:HS23120154-09
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 06-Dec-2023		Analyst: MSC	
Arsenic	U		0.000400	0.00200	mg/L	1	07-Dec-2023 22:39
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 22:39
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 22:39
Selenium	0.00113	J	0.00110	0.00200	mg/L	1	07-Dec-2023 22:39
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 06-Dec-2023		Analyst: JC	
Arsenic	U		0.000400	0.00200	mg/L	1	07-Dec-2023 23:37
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 23:37
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 23:37
Selenium	U		0.00110	0.00200	mg/L	1	07-Dec-2023 23:37

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: MW-47
Collection Date: 29-Nov-2023 15:20

ANALYTICAL REPORT

WorkOrder:HS23120154
Lab ID:HS23120154-10
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 06-Dec-2023		Analyst: MSC	
Arsenic	U		0.000400	0.00200	mg/L	1	07-Dec-2023 22:41
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 22:41
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 22:41
Selenium	0.00486		0.00110	0.00200	mg/L	1	07-Dec-2023 22:41
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 06-Dec-2023		Analyst: JC	
Arsenic	U		0.000400	0.00200	mg/L	1	07-Dec-2023 23:39
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 23:39
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 23:39
Selenium	0.00333		0.00110	0.00200	mg/L	1	07-Dec-2023 23:39

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: LMW-9R
Collection Date: 30-Nov-2023 08:15

ANALYTICAL REPORT

WorkOrder:HS23120154
Lab ID:HS23120154-11
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 06-Dec-2023		Analyst: MSC	
Arsenic	0.000717	J	0.000400	0.00200	mg/L	1	07-Dec-2023 22:44
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 22:44
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 22:44
Selenium	0.00210		0.00110	0.00200	mg/L	1	07-Dec-2023 22:44
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 06-Dec-2023		Analyst: JC	
Arsenic	0.000918	J	0.000400	0.00200	mg/L	1	07-Dec-2023 23:41
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 23:41
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 23:41
Selenium	U		0.00110	0.00200	mg/L	1	07-Dec-2023 23:41

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: WSP Golder
Project: Frisco CDC GW North CAMU
Sample ID: LMW-22
Collection Date: 30-Nov-2023 08:55

ANALYTICAL REPORT

WorkOrder:HS23120154
Lab ID:HS23120154-12
Matrix:Groundwater

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
ICP-MS METALS BY SW6020A		Method:SW6020A		Prep:SW3010A / 06-Dec-2023		Analyst: MSC	
Arsenic	0.00142	J	0.000400	0.00200	mg/L	1	07-Dec-2023 22:46
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 22:46
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 22:46
Selenium	0.00279		0.00110	0.00200	mg/L	1	07-Dec-2023 22:46
DISSOLVED METALS BY SW6020A		Method:SW6020A (dissolved)		Prep:SW3010A / 06-Dec-2023		Analyst: JC	
Arsenic	0.00132	J	0.000400	0.00200	mg/L	1	07-Dec-2023 23:43
Cadmium	U		0.000200	0.00200	mg/L	1	07-Dec-2023 23:43
Lead	U		0.000600	0.00200	mg/L	1	07-Dec-2023 23:43
Selenium	0.00116	J	0.00110	0.00200	mg/L	1	07-Dec-2023 23:43

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Weight / Prep Log

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23120154

Batch ID: 204439	Start Date: 06 Dec 2023 08:30	End Date: 06 Dec 2023 08:30
Method: WATER - SW3010A	Prep Code: 3010A	

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS23120154-01		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23120154-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23120154-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23120154-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23120154-05		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23120154-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23120154-07		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23120154-08		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23120154-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23120154-10		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23120154-11		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23120154-12		10 (mL)	10 (mL)	1	120 plastic HNO3

Batch ID: 204445	Start Date: 06 Dec 2023 12:30	End Date: 06 Dec 2023 12:30
Method: DISS METALS PREP - WATER - SW3010A	Prep Code: 3010A DISS	

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS23120154-01		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23120154-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23120154-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23120154-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23120154-05		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23120154-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23120154-07		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23120154-08		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23120154-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23120154-10		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23120154-11		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23120154-12		10 (mL)	10 (mL)	1	120 plastic HNO3

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23120154

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 204439 (0)		Test Name : ICP-MS METALS BY SW6020A			Matrix: Groundwater	
HS23120154-01	MW-45	29 Nov 2023 09:45		06 Dec 2023 08:30	07 Dec 2023 21:52	1
HS23120154-02	PMW-19R	29 Nov 2023 10:20		06 Dec 2023 08:30	07 Dec 2023 22:18	1
HS23120154-03	LMW-8	29 Nov 2023 11:05		06 Dec 2023 08:30	07 Dec 2023 22:20	1
HS23120154-04	LMW-17	29 Nov 2023 11:40		06 Dec 2023 08:30	07 Dec 2023 22:23	1
HS23120154-05	LMW-5	29 Nov 2023 12:15		06 Dec 2023 08:30	07 Dec 2023 22:25	1
HS23120154-06	LMW-21	29 Nov 2023 12:55		06 Dec 2023 08:30	07 Dec 2023 22:27	1
HS23120154-07	DUP-01	29 Nov 2023 12:15		06 Dec 2023 08:30	07 Dec 2023 22:30	1
HS23120154-08	PMW-20R	29 Nov 2023 13:45		06 Dec 2023 08:30	07 Dec 2023 22:37	1
HS23120154-09	MW-41	29 Nov 2023 14:30		06 Dec 2023 08:30	07 Dec 2023 22:39	1
HS23120154-10	MW-47	29 Nov 2023 15:20		06 Dec 2023 08:30	07 Dec 2023 22:41	1
HS23120154-11	LMW-9R	30 Nov 2023 08:15		06 Dec 2023 08:30	07 Dec 2023 22:44	1
HS23120154-12	LMW-22	30 Nov 2023 08:55		06 Dec 2023 08:30	07 Dec 2023 22:46	1
Batch ID: 204445 (0)		Test Name : DISSOLVED METALS BY SW6020A			Matrix: Groundwater	
HS23120154-01	MW-45	29 Nov 2023 09:45		06 Dec 2023 12:30	07 Dec 2023 23:01	1
HS23120154-02	PMW-19R	29 Nov 2023 10:20		06 Dec 2023 12:30	07 Dec 2023 23:20	1
HS23120154-03	LMW-8	29 Nov 2023 11:05		06 Dec 2023 12:30	07 Dec 2023 23:22	1
HS23120154-04	LMW-17	29 Nov 2023 11:40		06 Dec 2023 12:30	07 Dec 2023 23:24	1
HS23120154-05	LMW-5	29 Nov 2023 12:15		06 Dec 2023 12:30	07 Dec 2023 23:26	1
HS23120154-06	LMW-21	29 Nov 2023 12:55		06 Dec 2023 12:30	07 Dec 2023 23:28	1
HS23120154-07	DUP-01	29 Nov 2023 12:15		06 Dec 2023 12:30	07 Dec 2023 23:33	1
HS23120154-08	PMW-20R	29 Nov 2023 13:45		06 Dec 2023 12:30	07 Dec 2023 23:35	1
HS23120154-09	MW-41	29 Nov 2023 14:30		06 Dec 2023 12:30	07 Dec 2023 23:37	1
HS23120154-10	MW-47	29 Nov 2023 15:20		06 Dec 2023 12:30	07 Dec 2023 23:39	1
HS23120154-11	LMW-9R	30 Nov 2023 08:15		06 Dec 2023 12:30	07 Dec 2023 23:41	1
HS23120154-12	LMW-22	30 Nov 2023 08:55		06 Dec 2023 12:30	07 Dec 2023 23:43	1

WorkOrder: HS23120154

InstrumentID: ICPMS06

Test Code: ICP_DISS

Test Number: SW6020A (dissolved)

Test Name: Dissolved Metals by SW6020A

**METHOD DETECTION /
REPORTING LIMITS****Matrix:** Aqueous**Units:** mg/L

Type	Analyte	CAS	DCS Spike	DCS	MDL	PQL
A	Arsenic	7440-38-2	0.00125	0.000519	0.000400	0.00200
A	Cadmium	7440-43-9	0.000500	0.000494	0.000200	0.00200
A	Lead	7439-92-1	0.00125	0.000573	0.000600	0.00200
A	Selenium	7782-49-2	0.00250	0.000457	0.00110	0.00200

WorkOrder: HS23120154

InstrumentID: ICPMS07

Test Code: ICP_TW

Test Number: SW6020A

Test Name: ICP-MS Metals by SW6020A

**METHOD DETECTION /
REPORTING LIMITS****Matrix:** Aqueous**Units:** mg/L

Type	Analyte	CAS	DCS Spike	DCS	MDL	PQL
A	Arsenic	7440-38-2	0.00125	0.00132	0.000400	0.00200
A	Cadmium	7440-43-9	0.000500	0.000594	0.000200	0.00200
A	Lead	7439-92-1	0.00125	0.00124	0.000600	0.00200
A	Selenium	7782-49-2	0.00250	0.00321	0.00110	0.00200

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23120154

QC BATCH REPORT

Batch ID: 204439 (0)		Instrument: ICPMS07		Method: ICP-MS METALS BY SW6020A					
MBLK	Sample ID: MBLK-204439	Units: mg/L		Analysis Date: 07-Dec-2023 21:47					
Client ID:	Run ID: ICPMS07_453459		SeqNo: 7714319		PrepDate: 06-Dec-2023		DF: 1		
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Arsenic	U	0.00200							
Cadmium	U	0.00200							
Lead	U	0.00200							
Selenium	0.001453	0.00200							J

LCS	Sample ID: LCS-204439	Units: mg/L		Analysis Date: 07-Dec-2023 21:50					
Client ID:	Run ID: ICPMS07_453459		SeqNo: 7714320		PrepDate: 06-Dec-2023		DF: 1		
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Arsenic	0.04706	0.00200	0.05	0	94.1	80 - 120			
Cadmium	0.04619	0.00200	0.05	0	92.4	80 - 120			
Lead	0.04623	0.00200	0.05	0	92.5	80 - 120			
Selenium	0.04836	0.00200	0.05	0	96.7	80 - 120			

MS	Sample ID: HS23120154-01MS	Units: mg/L		Analysis Date: 07-Dec-2023 21:57					
Client ID: MW-45	Run ID: ICPMS07_453459		SeqNo: 7714323		PrepDate: 06-Dec-2023		DF: 1		
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Arsenic	0.04881	0.00200	0.05	0.000303	97.0	80 - 120			
Cadmium	0.04802	0.00200	0.05	0.000003	96.0	80 - 120			
Lead	0.04735	0.00200	0.05	0.000102	94.5	80 - 120			
Selenium	0.05336	0.00200	0.05	0.001988	103	80 - 120			

MSD	Sample ID: HS23120154-01MSD	Units: mg/L		Analysis Date: 07-Dec-2023 21:59					
Client ID: MW-45	Run ID: ICPMS07_453459		SeqNo: 7714324		PrepDate: 06-Dec-2023		DF: 1		
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Arsenic	0.04816	0.00200	0.05	0.000303	95.7	80 - 120	0.04881	1.33	20
Cadmium	0.0457	0.00200	0.05	0.000003	91.4	80 - 120	0.04802	4.94	20
Lead	0.04582	0.00200	0.05	0.000102	91.4	80 - 120	0.04735	3.3	20
Selenium	0.04853	0.00200	0.05	0.001988	93.1	80 - 120	0.05336	9.49	20

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23120154

QC BATCH REPORT

Batch ID: 204439 (0)		Instrument: ICPMS07		Method: ICP-MS METALS BY SW6020A					
PDS		Sample ID: HS23120154-01PDS		Units: mg/L		Analysis Date: 07-Dec-2023 22:02			
Client ID: MW-45		Run ID: ICPMS07_453459		SeqNo: 7714310		PrepDate: 06-Dec-2023		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	0.1006	0.00200	0.1	0.000303	100	75 - 125			
Cadmium	0.09384	0.00200	0.1	0.000003	93.8	75 - 125			
Lead	0.09409	0.00200	0.1	0.000102	94.0	75 - 125			
Selenium	0.105	0.00200	0.1	0.001988	103	75 - 125			

SD		Sample ID: HS23120154-01SD		Units: mg/L		Analysis Date: 07-Dec-2023 21:54			
Client ID: MW-45		Run ID: ICPMS07_453459		SeqNo: 7714322		PrepDate: 06-Dec-2023		DF: 5	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit Qual
Arsenic	U	0.0100					0.000303	0	10
Cadmium	U	0.0100					0.000003	0	10
Lead	U	0.0100					0.000102	0	10
Selenium	U	0.0100					0.001988	0	10

The following samples were analyzed in this batch:

HS23120154-01	HS23120154-02	HS23120154-03	HS23120154-04
HS23120154-05	HS23120154-06	HS23120154-07	HS23120154-08
HS23120154-09	HS23120154-10	HS23120154-11	HS23120154-12

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23120154

QC BATCH REPORT

Batch ID: 204445 (0)		Instrument: ICPMS06		Method: DISSOLVED METALS BY SW6020A (DISSOLVED)					
MBLK	Sample ID: MBLKF1-204445	Units: mg/L		Analysis Date: 07-Dec-2023 22:57					
Client ID:	Run ID: ICPMS06_453464		SeqNo: 7714733		PrepDate: 06-Dec-2023		DF: 1		
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	U	0.00200							
Cadmium	U	0.00200							
Lead	U	0.00200							
Selenium	U	0.00200							

MBLK	Sample ID: MBLK-204445	Units: mg/L		Analysis Date: 07-Dec-2023 22:55					
Client ID:	Run ID: ICPMS06_453464		SeqNo: 7714732		PrepDate: 06-Dec-2023		DF: 1		
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	U	0.00200							
Cadmium	U	0.00200							
Lead	U	0.00200							
Selenium	U	0.00200							

LCS	Sample ID: LCS-204445	Units: mg/L		Analysis Date: 07-Dec-2023 22:59					
Client ID:	Run ID: ICPMS06_453464		SeqNo: 7714734		PrepDate: 06-Dec-2023		DF: 1		
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	0.04556	0.00200	0.05	0	91.1	80 - 120			
Cadmium	0.04862	0.00200	0.05	0	97.2	80 - 120			
Lead	0.04748	0.00200	0.05	0	95.0	80 - 120			
Selenium	0.04571	0.00200	0.05	0	91.4	80 - 120			

MS	Sample ID: HS23120154-01MS	Units: mg/L		Analysis Date: 07-Dec-2023 23:04					
Client ID: MW-45	Run ID: ICPMS06_453464		SeqNo: 7714737		PrepDate: 06-Dec-2023		DF: 1		
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	0.04638	0.00200	0.05	0.000328	92.1	75 - 125			
Cadmium	0.04701	0.00200	0.05	0.000001	94.0	75 - 125			
Lead	0.0482	0.00200	0.05	0.000004	96.4	75 - 125			
Selenium	0.0475	0.00200	0.05	0.001393	92.2	75 - 125			

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23120154

QC BATCH REPORT

Batch ID: 204445 (0)		Instrument: ICPMS06		Method: DISSOLVED METALS BY SW6020A (DISSOLVED)					
MSD		Sample ID: HS23120154-01MSD		Units: mg/L		Analysis Date: 07-Dec-2023 23:06			
Client ID: MW-45		Run ID: ICPMS06_453464		SeqNo: 7714738		PrepDate: 06-Dec-2023		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	0.04761	0.00200	0.05	0.000328	94.6	75 - 125	0.04638	2.63	20
Cadmium	0.04794	0.00200	0.05	0.000001	95.9	75 - 125	0.04701	1.96	20
Lead	0.04821	0.00200	0.05	0.000004	96.4	75 - 125	0.0482	0.0207	20
Selenium	0.04846	0.00200	0.05	0.001393	94.1	75 - 125	0.0475	2	20
PDS		Sample ID: HS23120154-01PDS		Units: mg/L		Analysis Date: 07-Dec-2023 23:08			
Client ID: MW-45		Run ID: ICPMS06_453464		SeqNo: 7714739		PrepDate: 06-Dec-2023		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Arsenic	0.09378	0.00200	0.1	0.000328	93.4	75 - 125			
Cadmium	0.09781	0.00200	0.1	0.000001	97.8	75 - 125			
Lead	0.09584	0.00200	0.1	0.000004	95.8	75 - 125			
Selenium	0.09513	0.00200	0.1	0.001393	93.7	75 - 125			
SD		Sample ID: HS23120154-01SD		Units: mg/L		Analysis Date: 07-Dec-2023 23:02			
Client ID: MW-45		Run ID: ICPMS06_453464		SeqNo: 7714736		PrepDate: 06-Dec-2023		DF: 5	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit Qual
Arsenic	U	0.0100					0.000328	0	10
Cadmium	U	0.0100					0.000001	0	10
Lead	U	0.0100					0.000004	0	10
Selenium	U	0.0100					0.001393	0	10
The following samples were analyzed in this batch:									
HS23120154-01		HS23120154-02		HS23120154-03		HS23120154-04			
HS23120154-05		HS23120154-06		HS23120154-07		HS23120154-08			
HS23120154-09		HS23120154-10		HS23120154-11		HS23120154-12			

Client: WSP Golder
Project: Frisco CDC GW North CAMU
WorkOrder: HS23120154

**QUALIFIERS,
ACRONYMS, UNITS**

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	88-00356	27-Mar-2024
California	2919; 2024	30-Apr-2024
Dept of Defense	L23-358	31-May-2025
Florida	E87611-38	30-Jun-2024
Illinois	2000322023-11	30-Jun-2024
Kansas	E-10352 2023-2024	31-Jul-2024
Louisiana	03087 2023-2024	30-Jun-2024
Maryland	343; 2023-2024	30-Jun-2024
North Carolina	624-2023	31-Dec-2023
North Dakota	R-193 2023-2024	30-Apr-2024
Oklahoma	2023-140	31-Aug-2024
Texas	T104704231-23-32	30-Apr-2024
Utah	TX026932023-14	31-Jul-2024

Sample Receipt Checklist

Work Order ID: HS23120154

Date/Time Received: 01-Dec-2023 10:45

Client Name: Golder St Louis

Received by: Paresh M. Giga

Completed By: /S/ Belinda Gomez	04-Dec-2023 12:53	Reviewed by: /S/ Tyler Monroe	05-Dec-2023 19:42
eSignature	Date/Time	eSignature	Date/Time

Matrices: WCarrier name: FedEx

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	2 Page(s)
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	COC IDs:307472,307471
Samplers name present on COC?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	
Temperature(s)/Thermometer(s):	1.4uc/1.3c ir31		
Cooler(s)/Kit(s):	50750		
Date/Time sample(s) sent to storage:	12/4/23 1254		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☒
Water - pH acceptable upon receipt?	Yes ☒	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☒	N/A ☐
pH adjusted by:			

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

Corrective Action:

Chain of Custody Form

Page 1 of 2

COC ID: 307472

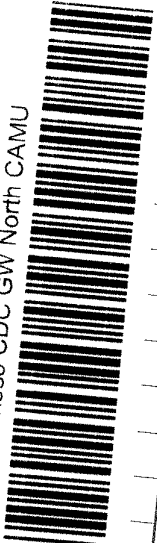
Houston, -
+1 281 530 5650

Middletown, PA
+1 717 944 5541

Salt Lake City
+1 801 266 7700

Customer Information			Project Information		ALS Project Manager:		ALS Work Order #:	
Purchase Order	GL20409D6201		Project Name	Frisco CDC GW North CAMU				
Work Order			Project Number	GL20409D6201				
Company Name	WSP Golder		Bill To Company	WSP Golder				
Send Report To	William Wedge		Invoice Attn	Accounts Payable WSP				
Address	701 Emerson Road Suite 250		Address	701 Emerson Road Suite 250				
City/State/Zip	Creve Coeur, MO 63141		City/State/Zip	Creve Coeur MO 63141				
Phone	(314) 984-8800		Phone	(314) 984-8800				
Fax			Fax					
e-Mail Address	William_Wedge@golder.com		e-Mail Address	USENVAccountspayable@wsp.com				
Sample Description			Date	Time	Matrix	Pres.	# Bottles	A B C D E F G
MW-45			11-29-23	0945	GW		4	X X X X
PMW-19R				1020	GW		2	X X X X
LMW-8				1105	GW		2	X X X X
LMW-17				1140	GW		2	X X X X
LMW-5				1215	GW		2	X X X X
LMW-21				1255	GW		2	X X X X
DVP-1				1215	GW		2	X X X X
PMW-20R				1345	GW		2	X X X X
mw-41				1430	GW		2	X X X X
mw-47				1520	GW		2	X X X X
Shipment Method			FEDEX		Required Turnaround Time: (Check Box)			
Received by:			Date: 11-30-23		☐ STD 10 Wk Days ☒ 5 Wk Days ☐ Other			
Received by (Laboratory):			Date: 12/1/23 10:45		Notes: Frisco Pre-Excavation			
Checked by (Laboratory):					Cooler ID: Blue			
Cooler Temp.:			0°C		QC Package: (Check One Box Below)			
Level II Std QC			☐		Level III Std QC Raw Data		☒	
Level IV SWG RCLP			☐		Other		☐	
Results Due Date:					TRRP Checklist		☒	
TRRP Level IV					TRRP Level IV		☐	

HS23120154
WSP Golder
Frisco CDC GW North CAMU



Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions of the Chain of Custody is a legal document. All information must be completed accurately.



+1 513 733 5336
Everett, WA
+1 425 356 2600

Fort Collins, CO
+1 970 490 1511
Holland, MI
+1 616 399 6070

Chain of Custody Form

Page 2 of 2

COC ID: 307471

Houston, TX
+1 281 530 5656

Middletown, PA
+1 717 944 5541

Salt Lake City, UT
+1 801 266 7700

Customer Information				Project Information				ALS Project Manager:		ALS Work Order #:					
Purchase Order	GL2040906201			Project Name	Frisco CDC GW North CAMU			Parameter/Method Request for Analysis							
Work Order				Project Number	GL2040906201			A ICP_TW (Total As, Cd, Pb, Se)							
Company Name	WSP Golder			Bill To Company	WSP Golder			B ICP_DISS (Dissolved As, Cd, Pb, Se)							
Send Report To	William Wedge			Invoice Attn	Accounts Payable WSP			C FILTRATION - METALS FIELD FILTERED							
Address	701 Emerson Road Suite 250			Address	701 Emerson Road Suite 250			D							
City/State/Zip	Creve Coeur, MO 63141			City/State/Zip	Creve Coeur MO 63141			E							
Phone	(314) 984-8800			Phone	(314) 984-8800			F							
Fax				Fax				G							
e-Mail Address	William_Wedge@golder.com			e-Mail Address	USENVAccountsPayable@wsp.com			H							
Sample Description				Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G
1 Lmw-9R				11-30-23	0815	GW		2	X	X	X				
2 Lmw-22				11-30-23	0855	GW		2	X	X	X				
3															
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Signature: *John R. Beaton*

Date: 11-30-23 Time: 1630

Received by: *[Signature]*

Received by (Laboratory): *[Signature]*

Checked by (Laboratory): *[Signature]*

Shipment Method: FEDEX

Required Turnaround Time: (Check Box)

☐ STD 10 Wk Days ☒ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour

Results Due Date:

Notes: Frisco Pre-Excavation

Cooler ID: Cooler Temp:

QC Package: (Check One Box Below)

☐ Level II Std QC ☒ TRRP Checklist

☐ Level III Std QC/Raw Data ☐ TRRP Level IV

☐ Level IV SWR-6/CLP

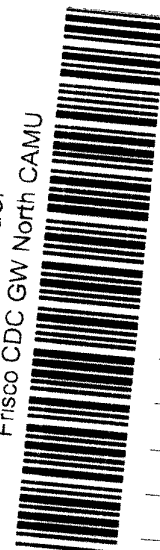
☐ Other:

1-HCl 2-HNO₃ 3-H₂SO₄ 4-NaOH 5-Na₂S₂O₃ 6-NaHSO₄ 7-Other 8-4°C 9-5035

Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.

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The Chain of Custody is a legal document. All information must be completed accurately.



HS23120154

WSP Golder

Frisco CDC GW North CAMU

(ALS)

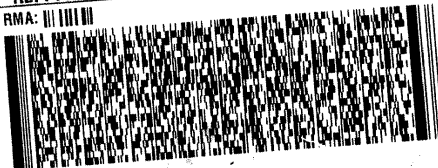
ORIGIN ID:SGRA (512) 501-5547
JOHN BRAYTON
WSP GOLDBER
1823 CALLENDER HILL ROAD
HANSFIELD, TX 76063
UNITED STATES US

SHIP DATE: 16NOV23
ACTWTG: 1.00 LB MAN
CNO: 0221247/CAFE3755
DIMS: 19x16x13 IN

TO ACCOUNTING
ALS GROUP USA
10450 STANCLIFF RD
SUITE 210
HOUSTON TX 77099

(281) 530-5656
REF: FRISCO CDC NORTH = BO 97032 - TM

RMA: III III III



FedEx
Express



FedEx

TRK#
0221

6862 6799 0630

43 SGRA

FRI - 01 DEC 12:00P
PRIORITY OVERNIGHT

77099

TX - US IAH



Seal Broken By: <i>BC</i>	Date: 12/1
CUSTODY SEAL	
Date: 11-30-23	Time: 11:30
Name: <i>WSP</i>	Company: <i>WSP</i>

ALS
10450 Stancliff Rd., Suite 210 Houston, Texas 77099 Tel. +1 281 530 5656 Fax. +1 281 530 5687

APPENDIX D

Data Usability Summaries



DATA USABILITY SUMMARY

ALS WORK ORDERS: HS23120154 and HS23090922

PROJECT NO: 2040906205.000

CLIENT: Frisco Community Development Corporation

SAMPLE DATES: September 11 and 12, 2023
November 29 and 30, 2023

LABORATORY: ALS Group

WORK ORDERS: HS23090922 and HS23120154

INTENDED USE: Second Semiannual 2023 Groundwater Monitoring Report

SITE: Frisco Community Development Corporation Site, 7471 Old 5th Street,
Frisco, TX

TESTS/METHODS

- SW-846 6020A - Inductively Coupled Plasma-Mass Spectrometry (ICP/MS)

SAMPLES

Eleven groundwater samples, one matrix spike and matrix spike duplicate sample, and one field duplicate sample were collected in September and November 2023 for the analyses of total and dissolved metals: arsenic, cadmium, lead, selenium. See Table 1 for the sample list.

WSP completed a review of the chemical analysis data for conformance with the requirements of the Texas Risk Reduction Program (TRRP) guidance document, Review and Reporting of COC Concentration Data (RGG-366/TRRP-13 Revised May 2010) and for adherence to project objectives. The results of the review are discussed in this data usability summary (DUS). WSP completed the review using the following laboratory and project submittals:

- Laboratory reportable data as defined in TRRP-13;
- Laboratory review checklists (LRC) with the associated exception reports;
- Laboratory Electronic Data Deliverable (EDD); and
- Project field notes from the sampling event.

The review of the reportable data included the quality control (QC) parameters listed below, as required per TRRP-13, using the applicable analytical method and project requirements:

- Data Completeness
- Chain-of-Custody Procedures
- Sample Condition

- Field Procedures
- Results Reporting Procedures
- Field and Laboratory Blanks
- Laboratory Control Sample (LCS)
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries
- Field Duplicate Precision
- Detectability Check Sample (DCS)

Additionally, WSP used the LRC to evaluate the following QC parameters:

- Method Quantitation Limits (MQLs)
- Method Detection Limits (MDLs) and Sample Detection Limits (SDLs)
- Instrument Tuning, Calibration, and Performance
- Internal Standards

Criteria used for this data usability review are as follows:

- Precision: $\pm$ MQL difference or 30% relative percent difference (RPD) for laboratory duplicates and $\pm 2x$ MQL difference (if either result is less than $5x$ MQL) or 30% RPD for field duplicates as recommended in TRRP-13
- Accuracy: 70-130% spike recovery (and not less than 30% or data is rejected) as recommended in TRRP-13

If an item was found outside of the review criteria, the reviewer applied a data qualifier and bias code to the results for the affected samples in accordance with TRRP-13.

LABORATORY CERTIFICATION

At the time the laboratory data were generated for this project, the laboratory was NELAC accredited under the Texas Laboratory Accreditation Program (TLAP Certification T104704231) for the matrices, methods and parameters of analysis requested on the chain-of-custody forms.

USABILITY SUMMARY

Data are usable for the intended purpose. Data were qualified due to exceedances of quality control criteria and analyte detected in quality control blank. (Table 2).

Preparer:	Kayla Fichtel	12/19/2023
Senior Reviewer:	Brenda Basile	12/19/2023

QUALITY CONTROL PARAMETERS AND OUTCOMES

Data Completeness

The laboratory data package contains necessary data (i.e., the laboratory reportable data per TRRP-13) and the EDD contains sample results in acceptable format.

Chain-of-Custody

Proper sample custody procedures were used, which confirms that the integrity of the samples was maintained. The information on the custody records is complete and agrees with that in the field notes and laboratory reports.

Sample Condition

Samples were collected in appropriate containers, properly preserved in the field, and prepared and analyzed within the holding times as required in the analytical method. No data were qualified.

Field Procedures

The samples were collected and placed immediately into laboratory supplied containers and then into a cooler with ice for overnight delivery to the laboratory.

According to the Work Plan, groundwater samples with turbidity greater than 10 nephelometric turbidity units (NTU) would be field filtered with a 10-micron filter for analyses of total metals. None of the groundwater samples collected had a turbidity greater than 10 NTU during this sampling event. For dissolved metals, samples were field filtered with a 0.45-micron filter. According to the Groundwater Sample Collection Forms, samples were filtered appropriately.

Results Reporting Procedures

Water results are reported in milligrams per liter (mg/L). Non-detects are reported using the SDL as specified per TRRP and detects between the SDL and MQL are reported with a laboratory J-flag. The concentration reported for detects between the SDL and MQL is below the calibration range and thus is considered estimated.

The dissolved metals concentrations were slightly above the total metal concentration in some samples as shown on Table 3. Total and dissolved concentrations were evaluated using a criteria of 30 RPD or less than two times the MQL as shown in Table 3. Qualified data are listed in Table 2.

Laboratory Blanks

Method blank and continuing calibration blank data provided by the laboratory were evaluated. Sample data associated with method blank data are qualified if the sample concentration is within five times the blank concentration. Sample data associated with continuing calibration blank data are qualified if the analyte is detected above the MDL and the sample concentration is detected. If data is qualified as estimated based on accuracy or precision criteria that was not met, the data is qualified with both a J-flag and a U-flag. Qualified data are shown on Table 2.

Laboratory Control Sample

The LCS recoveries (%R) are within the TRRP-13 recommended criteria of 80 -120 percent recovery (%R).

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

WSP submitted one MS/MSD for each sampling event (MW-45). The MS/MSD recoveries were within the TRRP-13 recommended criteria of 70-130% R. Precision was within the TRRP-13 recommended criteria of 30 RPD. The post-digestion spike recovery was within the TRRP-13 recommended criteria of 70-130% R. The serial dilution percent difference was within the method criteria of 10% difference.

Field Duplicate Precision

One field duplicate was collected for each sample event (LMW-5/DUP-01). Field duplicate results are presented in Table 5. Samples and COCs with duplicate with these samples precision were within the TRRP-13 recommended criteria of 30 RPD or less than two times the MQL as shown in Table 5.

Detectability Check Standards (DCS)

DCS data were provided in the laboratory report. DCS results support the SDLs in the laboratory report.

Instrument Tuning and Performance

According to the LRC, instrument tuning and interference check sample results met method requirements and therefore no data qualification was warranted.

Instrument Calibration

According to the LRC, calibrations were acceptable.

Internal Standards

According to the LRC, internal standard areas were acceptable.

Table 1
Cross-reference of Field Sample Identification and Laboratory Identifications
Frisco CDC GW North CAMU

Lab Sample Identification	Field Sample Identification	Sample Date	Total/Dissolved Metals	Comments
HS23090922-01	MW-45	9/11/2023	✓	Matrix Spike/Matrix Spike Duplicate
HS23090922-02	PMW-19R	9/11/2023	✓	
HS23090922-03	LMW-8	9/11/2023	✓	
HS23090922-04	LMW-17	9/11/2023	✓	
HS23090922-05	LMW-5	9/11/2023	✓	
HS23090922-06	LMW-21	9/11/2023	✓	
HS23090922-07	PMW-20R	9/11/2023	✓	
HS23090922-08	MW-41	9/11/2023	✓	
HS23090922-09	MW-47	9/11/2023	✓	
HS23090922-10	LMW-9R	9/12/2023	✓	
HS23090922-11	LMW-22	9/12/2023	✓	
HS23090922-12	DUP-01	9/11/2023	✓	Field duplicate of LMW-5
HS23120154-01	MW-45	11/29/2023	✓	Matrix Spike/Matrix Spike Duplicate
HS23120154-02	PMW-19R	11/29/2023	✓	
HS23120154-03	LMW-8	11/29/2023	✓	
HS23120154-04	LMW-17	11/29/2023	✓	
HS23120154-05	LMW-5	11/29/2023	✓	
HS23120154-06	LMW-21	11/29/2023	✓	
HS23120154-07	DUP-01	11/29/2023	✓	Field duplicate of LMW-5
HS23120154-08	PMW-20R	11/29/2023	✓	
HS23120154-09	MW-41	11/29/2023	✓	
HS23120154-10	MW-47	11/29/2023	✓	
HS23120154-11	LMW-9R	11/30/2023	✓	
HS23120154-12	LMW-22	11/30/2023	✓	

Table 2
Qualified Data
Frisco CDC GW North CAMU

Field Sample ID	Lab Sample ID	Analyte	Result	Units	Qualifier	Explanation
LMW-21	HS23090922-06	Lead, total	0.00303	mg/L	J	Dissolved concentration greater than total concentration
LMW-21	HS23090922-06	Lead, dissolved	0.00827	mg/L	J	Dissolved concentration greater than total concentration
MW-45	HS23120154-01	Selenium, total	0.00199	mg/L	U	Analyte detected in quality control blank
PMW-19R	HS23120154-02	Selenium, total	0.00340	mg/L	U	Analyte detected in quality control blank
LMW-17	H23120154-04	Selenium, total	0.00233	mg/L	U	Analyte detected in quality control blank
LMW-5	HS23120154-05	Selenium, total	0.00229	mg/L	U	Analyte detected in quality control blank
LMW-21	HS23120154-06	Selenium, total	0.00597	mg/L	U	Analyte detected in quality control blank
DUP-01	HS23120154-07	Selenium, total	0.00224	mg/L	U	Analyte detected in quality control blank
PMW-20R	HS23120154-08	Selenium, total	0.00355	mg/L	U	Analyte detected in quality control blank
MW-41	HS23120154-09	Selenium, total	0.00113	mg/L	U	Analyte detected in quality control blank
MW-47	HS23120154-10	Selenium, total	0.00486	mg/L	U	Analyte detected in quality control blank
LMW-9R	HS23120154-11	Selenium, total	0.0021	mg/L	U	Analyte detected in quality control blank
LMW-22	HS23120154-12	Selenium, total	0.00279	mg/L	U	Analyte detected in quality control blank

Notes:

J - Estimated data; data are qualified due to exceedance of one or more quality control criteria. The reported sample concentration is the approximate concentration of the analyte in the sample.

U - Analyte not detected at associated concentration (column labeled as "Result").

mg/L - milligrams per liter

Table 3
Total Versus Dissolved Comparison
Frisco CDC GW North CAMU

Sample	Analyte	Total Concentration (mg/L)	Dissolved Concentration (mg/L)	Precision (RPD)	MQL	Qualification
LMW-8 (November 2023)	Arsenic	0.000531	0.000572	7.4	0.00200	None; less than 30% RPD
LMW-5(November 2023)	Arsenic	<0.000400	0.000487	20	0.00200	None; less than 30% RPD
LMW-21(November 2023)	Arsenic	0.000499	0.000545	8.8	0.00200	None; less than 30% RPD
LMW-21 (November 2023)	Lead	<0.000600	0.000673	11	0.00200	None; less than 30% RPD
LMW-9R (November 2023)	Arsenic	0.000717	0.000918	25	0.00200	None; less than 30% RPD
PMW-19R (September 2023)	Arsenic	<0.000400	0.000454	13	0.00200	None; less than 30% RPD
LMW-8 (September 2023)	Selenium	<0.00110	0.00214	64	0.00200	None; difference less than 2 times the MQL
LMW-17 (September 2023)	Arsenic	0.000405	0.000595	38	0.00200	None; difference less than 2 times the MQL
LMW-5 (September 2023)	Arsenic	<0.000400	0.000466	15	0.00200	None; less than 30% RPD
LMW-21 (September 2023)	Arsenic	0.000707	0.000917	26	0.00200	None; less than 30% RPD
LMW-21 (September 2023)	Lead	0.00303	0.00827	93	0.00200	J
MW-41 (September 2023)	Selenium	0.00216	0.00228	5.4	0.00200	None; less than 30% RPD
MW-47 (September 2023)	Arsenic	0.00637	0.00778	20	0.00200	None; less than 30% RPD
LMW-9R (September 2023)	Arsenic	0.00238	0.00282	17	0.00200	None; less than 30% RPD
LMW-9R (September 2023)	Selenium	0.00276	0.00373	30	0.00200	None; less than 30% RPD
LMW-22 (September 2023)	Arsenic	0.00777	0.00978	23	0.00200	None; less than 30% RPD
LMW-22 (September 2023)	Lead	<0.000600	0.000916	42	0.00200	None; difference less than 2 times the MQL
DUP-01 (September 2023)	Arsenic	0.000401	0.000447	11	0.00200	None; less than 30% RPD

Notes:

No qualification necessary if the difference between dissolved and total did not exceed the analytical method error (i.e., + 2x MQL difference (if either result is less than 5x MQL) or 30% RPD).

mg/L - milligrams per liter

RPD - relative percent difference

MQL - Method quantitation limit

TABLE 4 - BLANK DETECTIONS

Lab Sample ID	Analyte	Result	Qualified Concentration	Units	Explanation
MBLK-204439	Selenium, total	0.001453	0.00727	mg/L	See qualifiers in Table 2
ICPMS07_453459 CCB 31	Selenium	0.001285	0.00643	mg/L	See qualifiers in Table 2
ICPMS07_453459 CCB 32	Selenium	0.001945	0.00973	mg/L	See qualifiers in Table 2

Notes:

mg/L - milligrams per liter

Table 5
Field Duplicate Precision Calculations
Frisco CDC GW North CAMU

Duplicate and Parent Sample Field Identification	Analyte	Sample Result	Duplicate Result	RPD ^a	Qualifier	Qualifier Added
LMW-5/DUP-01 (November 2023)	Arsenic, dissolved	0.000487 J	0.000400 U	20	A	None
	Selenium, total	0.00229	0.00224	2.2	A	None
LMW-5/DUP-01 (September 2023)	Arsenic, total	0.000400 U	0.000401 J	0.25	A	None
	Arsenic, dissolved	0.000466 J	0.000447 J	4.2	A	None
	Lead, total	0.00130 J	0.000869 J	40	A	None; absolute difference <2X MQL

Notes:

^a Relative Percent Difference (RPD) = $((SR - DR) * 200) / (SR + DR)$, where SR is the sample result and DR is the duplicate result.

A - Acceptable Data

The RPD test (<30%) applies if both results are greater than 5x MQL. Otherwise, the absolute difference test (< 2x MQL) applies.

NA - Not applicable

MQL - Method quantitation limit

mg/L - milligrams per liter

J - estimated value; detected between the MQL and SDL.

U - not detected at associated numerical value

wsp